The aerial portion of this manual has been prepared with the assistance of service and engineering specialists to acquaint you with the operation and maintenance of your new aerial. You are urged to read these publications carefully. Following the instructions and recommendations in this manual will help assure the safe and enjoyable operation of your aerial.

When it comes to service, remember that your manufacturer's dealer knows your aerial best and has factory-trained technicians and specialists who are interested in your satisfaction. To ensure the full period of your warranty all service work should be done by Rosenbauer or a Rosenbauer approved facility.

To maintain the structural warranty, it is the responsibility of the department to have the unit inspected by an authorized independent testing company on an annual basis. Copies of all such inspection forms are to be supplied to Rosenbauer at the following address.:

Rosenbauer Aerials
870 S. Broad St.
Fremont, NE 68025
P & F: (402) 721-7622

WARNING

Before operating unit, read and understand all operating and safety information in manual.

OPERATORS TRAINING

Designated Rosenbauer personnel offers preventative maintenance and hands-on operating familiarization prior to the department operating the unit.

It will be the responsibility of the department to permit only qualified operators, as determined by Fire Department, to operate the aerial apparatus. The operators must be aware of the proper fire ground tactics, practice all known safety rules such as ground support for proper stabilizer placement, use of auxiliary pads and awareness of overhead wires. It is also vital the operator understands the load chart as well as the capabilities and limitations of the device.

HYDRAULIC OIL ANALYSIS

Rosenbauer recommends that when the department receives the truck a hydraulic sample should be taken and tested to be used as a baseline for future maintenance checks. The analysis should included but is not limited to the partial count, spectrochemical, water content and viscosity. The oil sample should be taken from the aerial oil tank after oil has been warmed to normal system operation temperatures (115 degrees or higher)

AERIAL INSPECTION

Rosenbauer recommends a primary inspection be done after the delivery and operation familiarization are completed on the aerial. The inspection will help the operator become familiar with preventative maintenance procedures as well as the up keep of the aerial device including but not limited to cable adjustment, lubrication, cylinders and operations. The operator's awareness of how the properly adjusted aerial operates could prevent future failures or aerial damage.

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STRUCTURAL ADJUSTMENTS

Rosenbauer will not be held responsible for any adjustments or changes made to the aerial device including but not limited to drilling of holes or welding of any sort. If modifications need to be made to the device, written consent will need to be obtained from the aerial facility.

EQUIPMENT MOUNT ON AERIAL

All equipment mounted on the aerial device including but not limited to axes, pike poles, storage boxes, rescue baskets and roof ladders need to be mounted securely as the manufacturer intended for extreme travel conditions.

SAFETY OPERATIONS

It is the responsibility of the operator to know the condition of the aerial before operating. A quick and accurate visual check should be preformed of the following (but not limited to) cables, cylinders, pins, equipment, switches, monitors, intercoms etc.

DANGER

ELECTROCUTION HAZARD
THIS MACHINE IS NOT INSULATE

DEATH OR SERIOUS INJURY WILL RESULT FROM:

CONTACT WITH OR INADEQUATE CLEARANCE

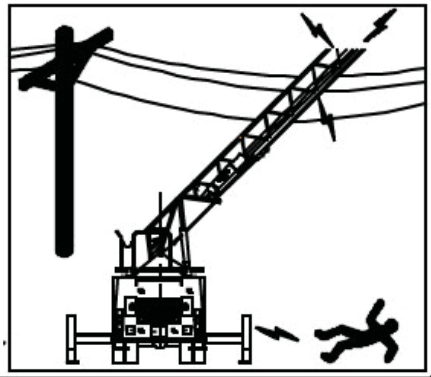
FROM ENERGIZED CONDUCTORS.

MAINTAIN SAFE CLEARANCE AREA FROM

ELECTRICAL POWER LINES AND APPARATUS.

YOU MUST ALLOW FOR AERIAL SWAY, ROCK OR SAG.

IF VEHICLE SHOULD BE ELECTRICAL CHARGES KEEP CLEAR OF TRUCK AND ATTACHMENTS



DANGER

AN UNTRAINED OPERATOR SUBJECTS HIMSELF AND OTHERS TO DEATH OR SERIOUS INJURY.

YOU MUST NOT OPERATE THIS MACHINE UNLESS:

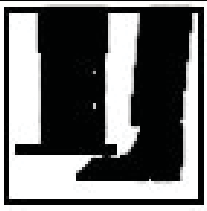
YOU HAVE BEEN TRAINED IN THE SAFE OPERATION OF THE MACHINE

YOU READ, UNDERSTAND AND FOLLOW THE SAFETY AND OPERATION RECOMMENDATIONS CONTAINED IN THE MACHINE MANUALS.

YOUR EMPLOYERS WORK, RULES AND APPLICABLE GOVERNMENT REGULATIONS.

WARNING

STAND CLEAR OF OUTRIGGER
OUTRIGGERS CAN CAUSE SERIOUS
CRUSHING INJURY



DANGER

ELECTROCUTION HAZARD.
MINIMUM POWER LINE CLEARANCE
IS 10 FEET. DO NOT OPERATE
DURING ELECTRICAL STORMS.

DANGER

LIVE LOAD RATING 500 LBS AT TIP WITH 1,000 GPM OF WATER AT 90 DEGREES TO SIDE.

WARNING

FAILURE TO OBEY THE FOLLOWING CAN RESULT IN DEATH OR SERIOUS INJURY.

INSPECT VEHICLE AND AERIAL DEVICE INCLUDING OPERATION DAILY PRIOR TO USE.

FOR STATIONARY OPERATION VEHICLE MUST BE SECURELY PARKED AND STABILIZED BEFORE THE WORK TO BE PREFORMED AND BEFORE THE AERIAL DEVICE CAN BE OPERATED.

OUTRIGGERS MUST BE ON SOLID FOOTING TO PREVENT TIP OVER.

OPERATORS SHOULD WEAR A BODY BELT AND ATTACHED WITH LINEAR TO AERIAL.

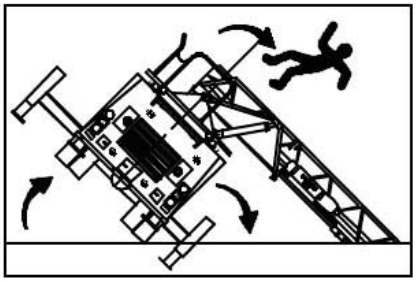
OPERATE ALL CONTROLS SLOWLY FOR SMOOTH MOTION.

DO NOT LOAD BEYOND RATED CAPACITY.

OPERATOR MUST WEAR PROPER PROTECTION GEAR.

CAUTION

WHEN ROTATING LADDER ON SAME SIDE AS SHORT-SET OUTRIGGERS.



DANGER

DO NOT WELD, DRILL OR ALTER THIS AERIAL DEVICE OR SUPPORTING STRUCTURE WITHOUT PRIOR APPROVAL OF THE AERIAL MANUFACTURER.

CAUTION

OPERATING AERIAL WHILE PERSONNEL IS ON LADDER MAY RESULT IN SERIOUS INJURY OR DEATH

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AERIAL CONSTRUCTION COMPONENTS

The aerial device is made to assist firefighters and civilians in potential life threatening situations. The aerials main members are constructed out of 100,000 and 70,000 PSI steel to ensure the tensile strength of each section. Each section consist of diagonals, k-braces, handrails and rungs.

The rungs are covered with a high traction cover to ensure a safe climbing environment. The rungs are round in shape to ensure a large stepping area.

The aerial will either be sealed with a primer and paint to protect the aerial from corrosion or hot dipped galvanized in a vat of molten zinc to protect the entire interior and exterior from corrosion.

TURNTABLE CONSTRUCTION COMPONENTS

The turntable is connected to the bearing plate using grade 8 bolts. It is the connecting point of the aerial hoist cylinders and the operators station. The walking surface for the turntable is skid-resistant aluminum tread brite. The turntable has lights installed to illuminate it for night time operation.

TORQUE BOX CONSTRUCTION COMPONENTS

The torque tube is designed to accommodate the correct strength to weight ratio. It is the substructure of the aerial and the turntable is connected to it.

The torque box will either be sealed with a primer and paint to prevent the torque box from corrosion or be hot dipped galvanized in a vat of molten zinc to protect the entire interior and exterior from corrosion.

ELEVATION SYSTEM

Two elevating cylinders are connected from the underside of the base section to the aerial turntable. They allow the aerial to elevate from -10 degrees to +75 degrees. Each cylinder has counterbalance valves connected directly to the barrel of the cylinder. The cylinders have spherical bushings to minimize cylinder rod wear. A pressure-reducing valve limits the force of the aerial when lowering and the system pressure limits the force when elevating the aerial.

EXTENSION/RETRACTION SYSTEM

Two extension cylinders are connected to the base section of the ladder. The extension cylinders have counter balance valves mounted directly to the rod side of the cylinder. The extension cylinders extend and retract the aerial with a 4:1 cable cylinder arrangement from totally retracted to 109’ at 75 degrees totally extended.

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ROTATION SYSTEM

One hydraulically motor operate planetary gearbox is installed on the turntable to allow for continuous 360 degree rotation. The turntable bearing bolts are required to be checked and re-torqued at regular intervals, the bolts are able to be easily re-torqued from the top of the turntable. The bearing is bolted to the bearing base plate using sixty (60) 5/8" SAE Grade 8 bolts. The bearing is bolted to the turntable using fifty-five (55) 5/8" SAE Grade 8 bolts. One hydraulic release/spring brake provides a positive lock to prevent rotation. One pressure reducing valve controls the force of the rotation and the side loads on the aerial.

ROTATION INTERLOCK

A rotation interlock has been put into place to prevent the rotation of the aerial into an unsafe or potential tip over situation.

BOOM SUPPORT

A heavy duty boom support is provided behind the cab and connected to the frame rails of the chassis to support the aerial device. The boom support doubles as the aerial oil tank reservoir.

OPERATION CONTROL LOCATIONS

Two control boxes are located one on the left and one on the right of the back of the truck for operation of the outriggers. One box is located in the lower center of the back of the truck to serve as an overall information and operation station for both outrigger control locations.

The main operators control stand will be on the turntable unless otherwise specified. Other operators stations will be as specified.

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IMPORTANT:

The following operating procedures are intended to assist in safe operation of the aerial. Any deviation from these procedures is not recommended and is done so at the risk of the operator.

Pre-Driving Checks

It is important to check the following items before driving the truck.

1. Ladder fully stowed in ladder bed. Door ajar light will illuminate indicating ladder is not stowed (optional).
2. Outriggers stowed for travel. Door ajar light will illuminate indicating outriggers are not stowed.
3. Aerial Master switch (or aerial master/PTO switch) is in the Off position (switch located in cab).

Positioning the Truck for Operation

1. Determine if the aerial will be used as a water tower or for rescue.
2. Make sure to note ALL overhead obstructions.
3. Scan scene to position the truck for best attack.
   NOTE: For the best positioning, a corner of a building is highly suggested. This gives the operator access to two sides of the structure as well as the roof.

REMINDER: The operator should always observe the placement of the fire fighting vehicle to be sure that there is enough space for the stabilizers to be set and the aerial to be operated without any obstructions.

Obstructions to be most aware of include, but are not limited to: adjacent buildings, curbs, drop-offs at road edges, man holes, vehicles, trees, over head electrical wires, ditches and culverts.

DANGER

Should the aerial come into contact with an electrical wire the operator needs to stay on the truck as all personnel has become part of the charge of the wire . Should the operator need to get off the truck the operator should do so by jumping off and not stepping. Stepping off will cause a surge from the ground to the truck using the operator as it's electrical passageway causing serious injury or death.

The aerial apparatus can be set up one of two ways, uphill or downhill. Depending on the situation one method could prove to be more accommodating then the other. Operators should be aware of the advantages and disadvantages of each method to determine how the tuck will be positioned. In either condition, the truck is capable of being leveled within safe operating parameters.

SETTING FRONT OF TRUCK TO UPHILL GRADES

With maximum grades the truck should be positioned with the cab facing uphill. Aerial should be operated over the rear.

Advantages:

- Can reduce the truck's grade by extending the rear outrigger stabilizer jacks.
- When truck is set up the front tires will be in contact with the ground.
- With the outriggers set operator has more ballast for the operation of the aerial

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Disadvantages:
- Since only the front tires are on the ground there is less resistance to prevent truck movement.
- The rear compartment and aerial access step are more difficult to access.

SETTING FRONT OF TRUCK TO DOWNHILL GRADE

Advantages:
- Rear compartments are closer to the ground for easier access.
- Better resistance to keep the truck from sliding by having more tires in contact with the ground.

Disadvantages:
- Can not reduce the trucks grade by extending the front outrigger stabilizer jacks. FRONT TIRES MUST STAY ON THE GROUND WHEN OPERATING OVER THE FRONT OF THE TRUCK.
- It is possible that the truck will teeter if the aerial is operated over the front stabilizers with the front tires off the ground.
- Their will be less ballast for aerial operations with the rear tires on the ground.
- When setting up the stabilizers the ground must be firm. It is highly recommended that the operator uses the outrigger pads provided. Setting up over manholes, underground parking facilities or storm drains could cause serious damage to the operator and/or serious damage to the truck. The area must be able to support 75 PSI.

With a Rear Mounted Aerial truck positioned down hill the front tires must stay in contact with the ground if operating the aerial with the ladder over 50% extended and within 45 degrees rotation either side of the cab.

The aerial is capable of being operated with full rated capabilities in any plane up to 5 degrees out of level with the turntable leveled as much as possible by placement of the outriggers. Operation beyond this limit is not recommended and could lead to catastrophic failure of ladder components resulting in injury or death.

SETTING THE CAB

1. Place the transmission into the neutral position
2. Set the park brake
3. Switch on the aerial master. When the aerial master is switched on there is electrical power to the aerial system. At this time flashing lights on the outriggers will begin to operate.
4. Switch on the Power Take-Off (PTO).

Note: It is important to note that step # 4 cannot be performed before step # 3 has been completed and step # 2 cannot be completed until step # 1 has been completed. Some trucks will have the aerial master and PTO switch combined .

The transmission must be in neutral or 4th gear for the water pump to be engaged. The parking brake must be set before the ladder power will operate. If the water pump is engaged, the high idle of the aerial will be disengaged.

A qualified operator, as determined by the fire department, is now ready to set the stabilizers.

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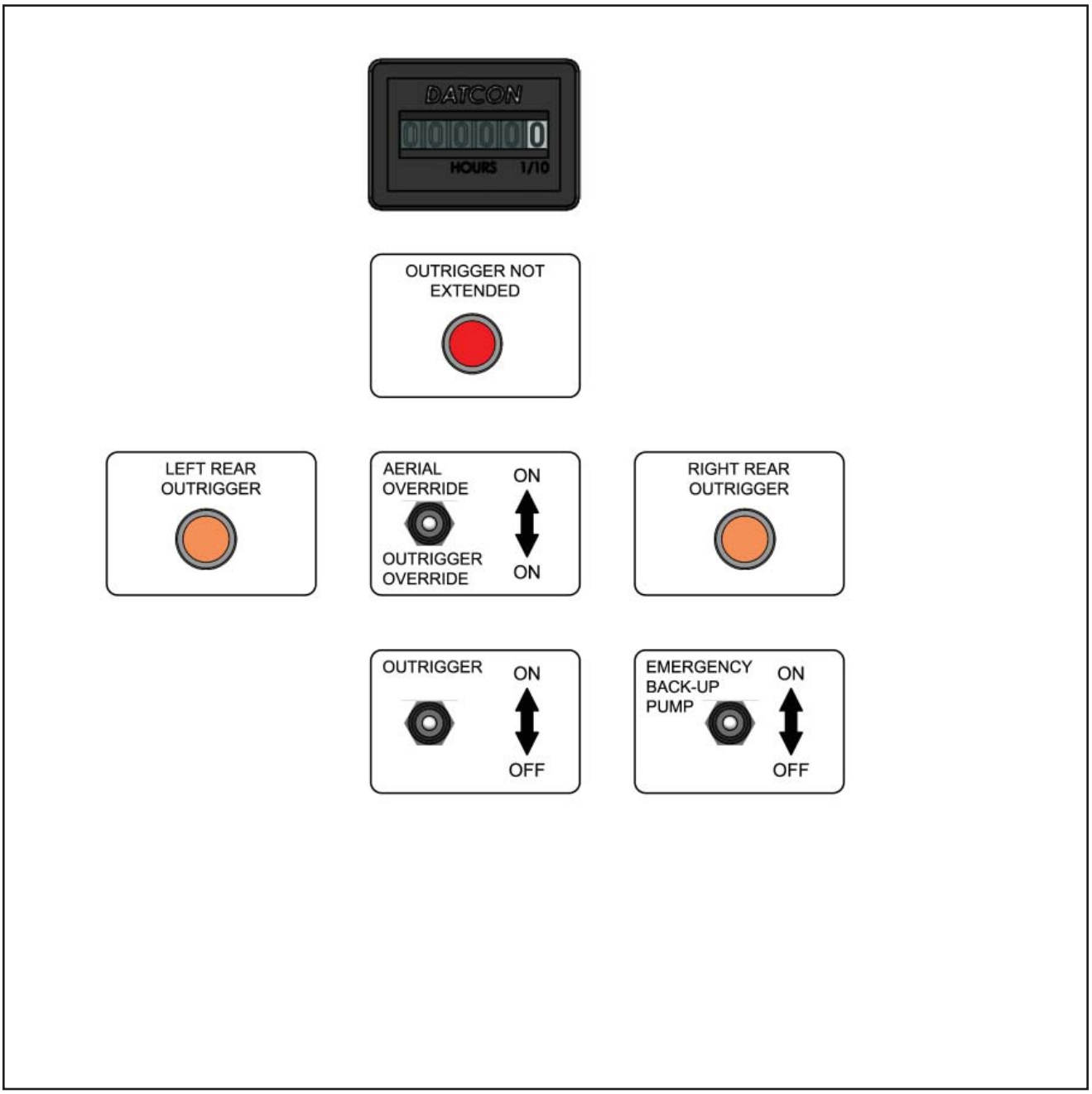
1. Outrigger On/Off Switch
2. Aerial/Outrigger Override Switch
3. Jack Lights
4. Outrigger Not Extended Light
5. Hour Meter
6. Emergency Hydraulic Backup Pump Switch



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SMART AERIAL OUTRIGGER PANEL

1. Outrigger On/Off Switch

   The Outrigger On/Off Switch must be turned on before the outriggers can be operated. This will enable the high idle if water pump is not engaged.

2. Aerial/Outrigger Override Switch

   - With the aerial out of the bed, the outriggers can no longer be operated. If a case arises where the outriggers need to be readjusted, activate the momentary Aerial/Outrigger Override Switch down to Outrigger Override. Adjust the outrigger controls (left/right, up/down) until the outrigger is set to the desired place.
   - If a case arises where the aerial needs to be overridden, activate the momentary Aerial/Outrigger Override Switch up to Aerial Override. A second operator will then need to adjust the aerial to the desired location using the manual aerial controls (extend/retract, left/right, raise/lower). Extreme caution must be taken when using the overrides.

3. Outrigger Jack Lights

   The Jack Lights are provided for each outrigger jack to indicate when an outrigger makes contact with the ground. The Jack Light will remain unlit when the outrigger is fully retracted and the jack is not set on the ground. The Jack Light will remain lit solidly if the jack is set on the ground and the outrigger is fully extended.

4. Outrigger Not Extended Light

   The Outrigger Not Extended Light will stay illuminated until all outriggers have been fully extended and are making contact with the ground.

5. Aerial Hour Meter

   The Hour Meter keeps record of the hours the aerial has operated (only while the aerial is moving).

6. Emergency Back up Pump Switch

   - The sole purpose of the Emergency Back-Up Pump is to stow the aerial in case of hydraulic failure.
   - To Use Emergency Back-Up Pump
     1. Select the operation required (outrigger or aerial) and move switch to the on position.
     2. Engage the outrigger or aerial control handle.
     3. Activate momentarily the Emergency 12V Back-Up Pump
   - To ensure that the Emergency Back-Up Pump doesn't over heat, it can only operate 5 minutes out of 60.

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SETTING THE OUTRIGGERS:

With tire chocks set, the operator will proceed to the outrigger station. The Outrigger Not Extended Light will be illuminated. This light will stay illuminated until all outriggers have been fully extended and are making contact with the ground.

1. Move Outrigger On/Off Switch to the ON position
   - This will cause the high idle to engage and the warning alarm will begin. The alarm alerts all other personnel the outriggers are being positioned. If the water pump is engaged the high idle of the aerial will be disengaged.
2. Use Controllers to Extend Outriggers.
   - The outrigger controls are located to the back, outside of the truck to provide the operator a good clear vision to set up the outriggers.
   - The controllers are designed to move in the same direction as the corresponding outrigger. (Example: To extend the right outrigger you would push the controller to the right to extend and to the left to retract.)
3. Position outrigger pads under jack locations
4. Lower outrigger jacks
   - The controllers are designed to move in the same direction as the corresponding outrigger. (Example: To lower the right outrigger you would push down on the controller.)
   - Take the bubble out of the truck tire or level truck as much as possible.
   - As the truck is leveled or the bubble is taken out, each Jack Indicator Light will respond according to how the outrigger is set.
   - Once all outrigger beams are fully extended and making contact with the ground the Outrigger Not Extended Light will go out.
5. When outriggers are set move the Outrigger On/Off Switch to the OFF position.
6. Install outrigger jack safety pins.
   - Safety pins are not required for operating the aerial. However, we strongly recommend installing them as an additional back up safety feature.

Outrigger operation set up is completed.

NOTE: The aerial safety interlock control system will not activate until the outriggers are placed securely on the ground.

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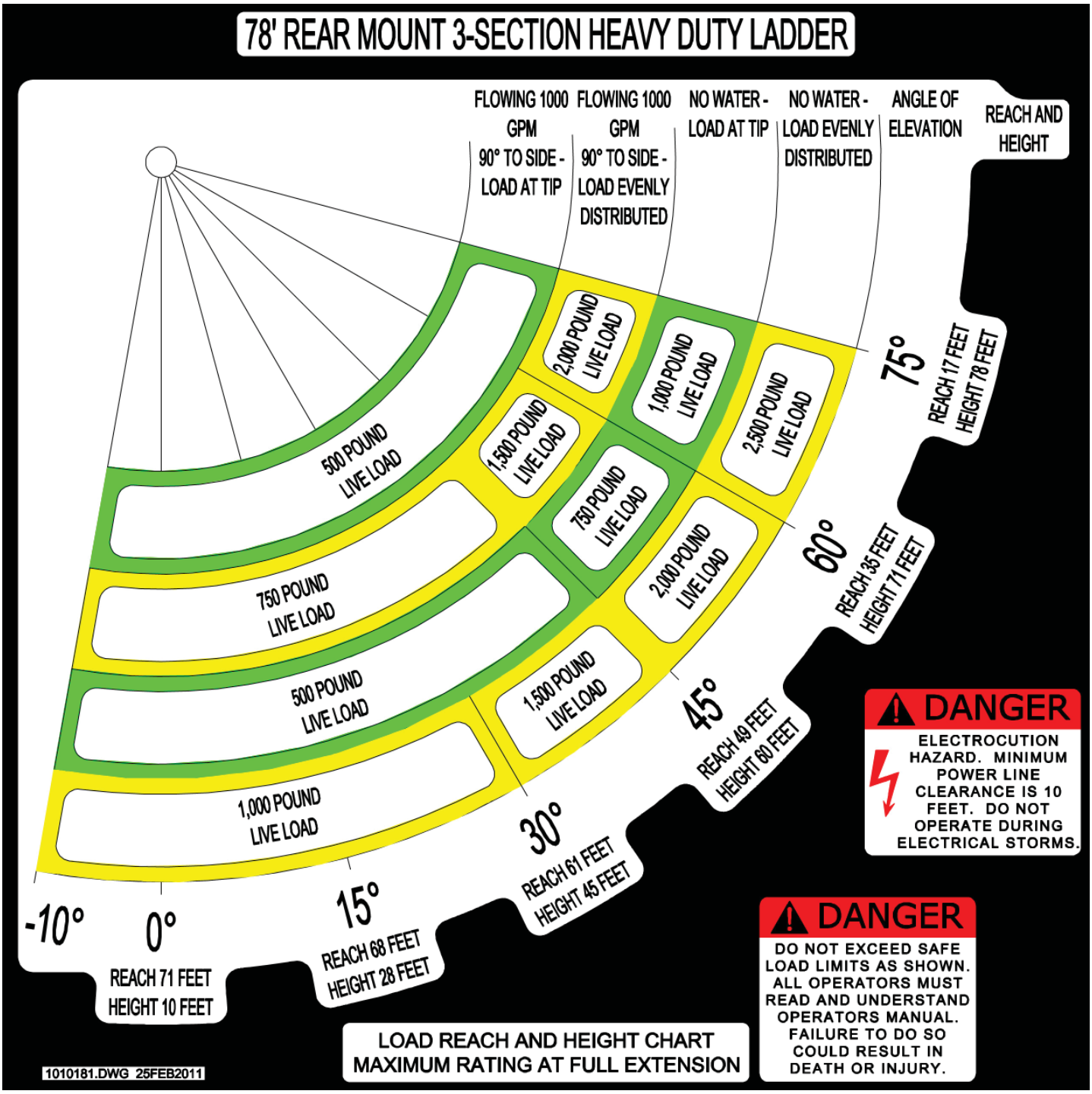
LOAD CHART


78' REAR MOUNT 3-SECTION HEAVY DUTY LADDER
FLOWING 1000 GPM 90° TO SIDE - LOAD AT TIP
FLOWING 1000 GPM 90° TO SIDE - LOAD EVENLY DISTRIBUTED
NO WATER - LOAD AT TIP
NO WATER - LOAD EVENLY DISTRIBUTED
ANGLE OF ELEVATION
REACH AND HEIGHT
500 POUND LIVE LOAD
750 POUND LIVE LOAD
500 POUND LIVE LOAD
1,000 POUND LIVE LOAD
1,500 POUND LIVE LOAD
2,000 POUND LIVE LOAD
1,500 POUND LIVE LOAD
750 POUND LIVE LOAD
2,000 POUND LIVE LOAD
1,000 POUND LIVE LOAD
2,500 POUND LIVE LOAD
-10°
0°
REACH 71 FEET
HEIGHT 10 FEET
15°
REACH 68 FEET
HEIGHT 28 FEET
30°
REACH 61 FEET
HEIGHT 45 FEET
45°
REACH 49 FEET
HEIGHT 60 FEET
60°
REACH 35 FEET
HEIGHT 71 FEET
75°
REACH 17 FEET
HEIGHT 78 FEET
DANGER
ELECTROCUTION HAZARD. MINIMUM POWER LINE CLEARANCE IS 10 FEET. DO NOT OPERATE DURING ELECTRICAL STORMS.
DANGER
DO NOT EXCEED SAFE LOAD LIMITS AS SHOWN. ALL OPERATORS MUST READ AND UNDERSTAND OPERATORS MANUAL. FAILURE TO DO SO COULD RESULT IN DEATH OR INJURY.
LOAD REACH AND HEIGHT CHART
MAXIMUM RATING AT FULL EXTENSION
1010181.DWG 25FEB2011

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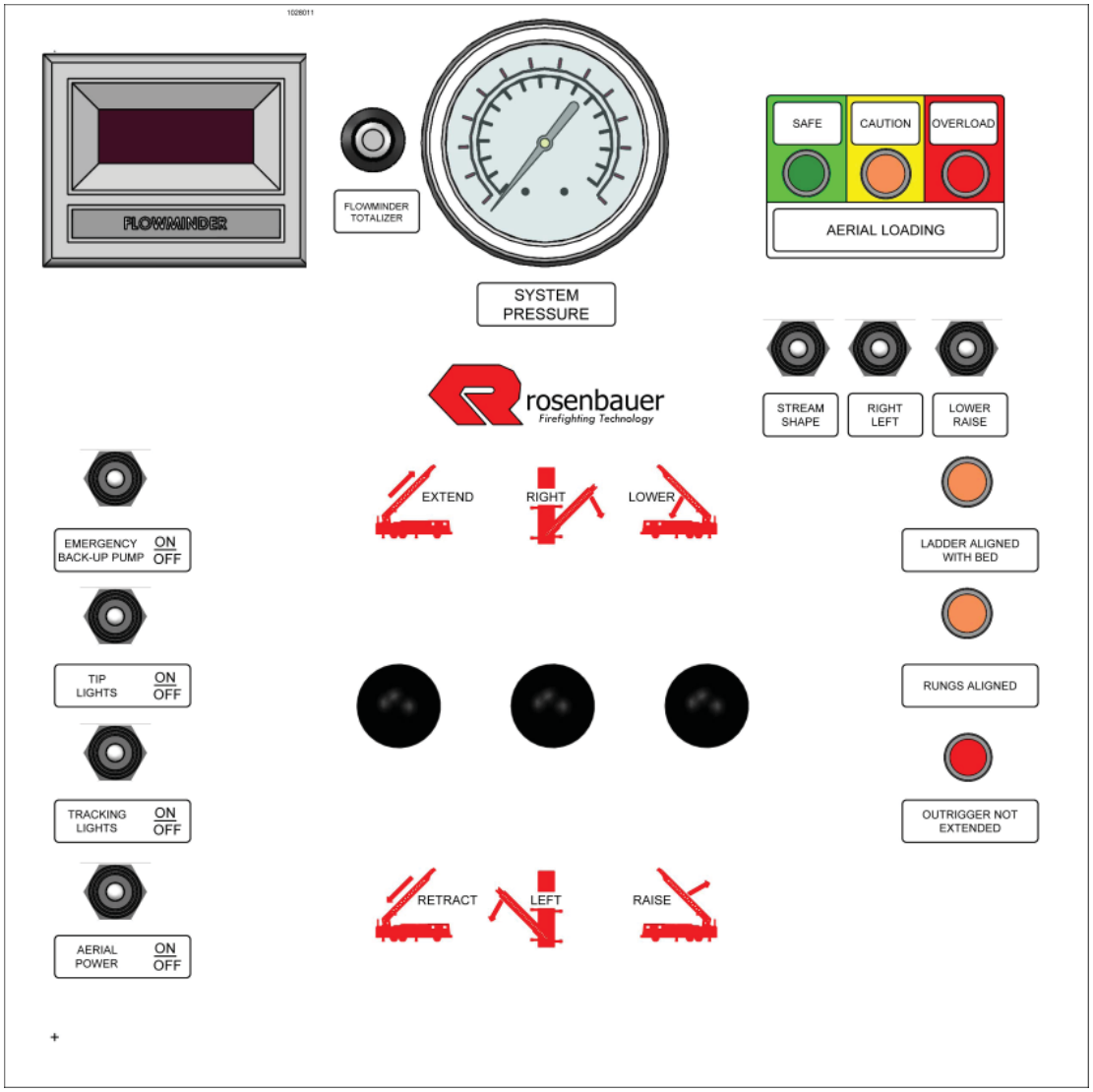
AERIAL CONTROL PANEL:

This control panel below contains options that may or may not be see on the panel. The switches were placed according to how they would fit in this configuration. Switches may be in a slightly different location depending on options purchased with the aerial.

1. Aerial Power Switch
2. Tracking Lights Switch
3. Tip Lights Switch
4. Emergency Back-Up Pump Switch
5. Flowminder
6. Flowminder Totalizer
7. System Pressure
8. Load Gauge
9. Monitor Controls Switches
10. Ladder Aligned with Bed Light
11. Rungs Aligned Light
12. Outrigger Not Extended Light
13. Manual Aerial Controls



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CONTROL PANEL FUNCTIONS

1. Aerial On/Off Switch
   To run the aerial this switch needs to be placed in the on position.

2. Tracking Lights Switch
   To activate the tracking lights (lights located on the base section in front of the elevation cylinders) this switch will need to be placed in the on position. This switch will activate all AC and DC tracking lights as well as the panel light and optional rung lighting. Most AC and DC lights provided also include a switch on the lamp head itself. If personnel switched the switch on the lamp head to the off position the operator will not be able to override it from the control panel. The switch will need to be reengaged from the lamp head.

3. Tip Lights Switch
   To activate the tip lights (lights located on the fly section) this switch will need to be placed in the on position. This switch will activate all AC and DC lights at the tip. Most AC and DC lights provided also include a switch on the lamp head itself. If personnel switched the switch on the lamp head to the off position the operator will not be able to override it from the control panel. The switch will need to be reengaged from the lamp head.

4. Emergency Hydraulic Pump Switch
   The emergency hydraulic pump switch is a momentary switch. Emergency Back-Up Pump switch is only used to stow the aerial in case of hydraulic failure. It is recommended that the emergency hydraulic pump only run for 5 minutes out of 60 minutes.

5. Flow Gauge
   The flow gauge will give a continues reading of the water flowing from the monitor. Depending on options this could be a combination pressure and flow gauge and will vary by manufacturer.

6. Flow Gauge Totalizer
   The totalizer button only comes with certain flow gauges. Press the button to get the total amount of water flown.

7. Hydraulic System Pressure Gauge
   This gauge shows the current hydraulic system pressure while the aerial is operating.

8. Aerial Load Monitor
   An aerial load monitor will continuously monitor the load on the device. It includes three lights green amber and red. The green light indicates the load is within load limits. The amber light indicates caution, alerting the operator that the load is getting closer to overload. The red light will flash when the rated load capacity is approximately 50 pounds less than the rated live load. The horn will emit a constant sound when the rated capacity is exceeded by more then 100 pounds of the rated live load.

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CONTROL PANEL FUNCTIONS CONTINUED

9. Monitor Control Switches
   Three monitor toggle switches or the manufactured monitor controls will control the monitor (stream/shape, right/left, lower/raise). Push up on the individual switches to activate the stream, right & lower functions of the monitors. Push down on the individual switches to activate the shape, left and lower functions of the monitors. To turn off the switches the operator will need to release the switch to the neutral position.

10. Ladder Aligned with Bed Light
    The ladder aligned with bed light will be illuminated when the ladder is aligned with the bed and ready to be stowed.

11. Rung Alignment Light
    The rung alignment light will illuminate when the rungs are aligned. While extending or retracting the aerial this light will flash on and off in accordance with the rungs being aligned. It is recommended that the rungs be aligned when personnel are climbing the aerial for personal safety.

12. Outrigger Not Extended Light
    The outrigger not extended light will be illuminated if any outrigger does not have solid contact with the ground.

13. Manual Aerial Control Handles
    The three controllers will operate the aerial functions (extend/retract, left/right & raise/lower). In order to activate the controller step on the deadman foot switch. Push or pull the appropriate controller to move the aerial. See aerial operations.

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AERIAL OPERATIONS

Before operating the aerial, the operator must be aware of all the load limitations, angle indicators and stabilizer set up.

WARNING

- The operator is responsible for knowing the condition of the aerial device before operating. This should include a quick visual scan of, but not limited to pins, cables, cylinders, loose equipment, ladder placement, etc..
- During aerial operations safety chains must be connected to close exit/entry position or the optional spring loaded ManSaver safety bar must be across the turntable exit/entry position.
- The operator should be stationed at the turntable control station at all times while the aerial is out of the bedded position.
- All personnel on ladder should wear safety belts at all times.

OPERATING THE AERIAL

1. Open the control console cover.
2. Turn the aerial power switch to the on position.
3. Turn on the required switches for lighting.
4. To raise the aerial, step on the deadman foot switch to activate the high idle. Pull back on the raise lever to raise the aerial out of the boom support. Raise aerial high enough to avoid any body or cab mounted lighting or equipment.

WARNING

Do not extend or retract the ladder sections with personnel standing on the ladder sections, as legs and feet may be jammed between the rungs.

5. To extend the aerial, step on the deadman foot switch to activate the high idle. Push forward on the extend lever. As the aerial extends the rung alignment light will illuminate when the rungs are aligned. When the aerial is at the desired extension make sure the light is illuminated. This will ensure a easier and safer climbing surface.
6. To rotate the turntable clockwise (right), step on the deadman foot switch and push the rotation lever forward. To rotate counterclockwise (left), pull back on the rotation lever.

NOTE: Steps four through six can be repeated as many times as needed to set the aerial to the desired position.

The aerial has the capability to have the elevation, extension, and rotation functions be performed simultaneously. It is strongly recommended that only one function be performed at a time. If in situations of extreme emergency which require performing more than one function at a time it is recommended the aerial be operated by an experienced operator.

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STOWING THE AERIAL

After aerial operations are complete fully retract the aerial and rotate it over the ladder bed. When the ladder is aligned with the bed the ladder aligned with bed light will illuminate. Lower the aerial into the ladder bed for proper storage.

STOWING THE OUTRIGGERS

Once the aerial is bedded the outriggers need to be stowed.

1. Pull all the safety pins from the outriggers
2. Turn the outrigger on/off switch to the on position. This will cause the alarm to sound.
3. Retract and stow the outrigger, these operations can be done simultaneously.
   - Note: Make sure the outrigger pads have been picked up and stowed in the designated location on the truck.
4. Turn the outrigger on/off switch to the off position.

Before driving the truck make sure to turn the aerial master switch or switch in the cab to the off position. Also, check to make sure all doors are secure and equipment has been stowed. If the door ajar light is illuminated the aerial (optional) or outriggers may not be stowed correctly.

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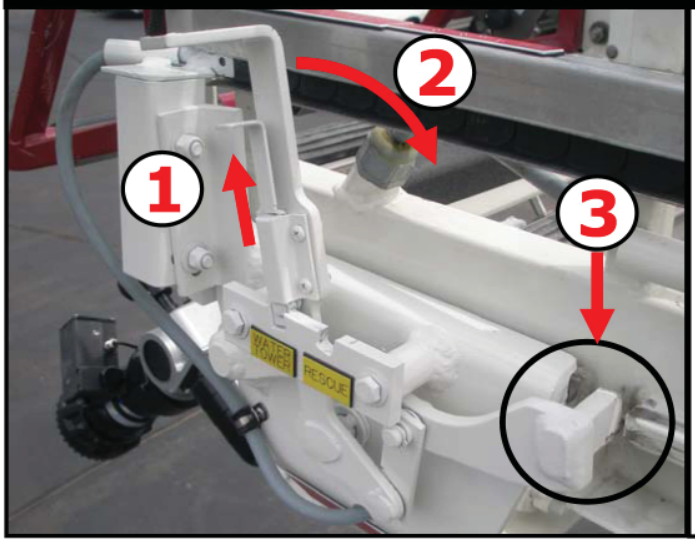
Process For Locking/Unlocking Aerial Waterways

WARNING

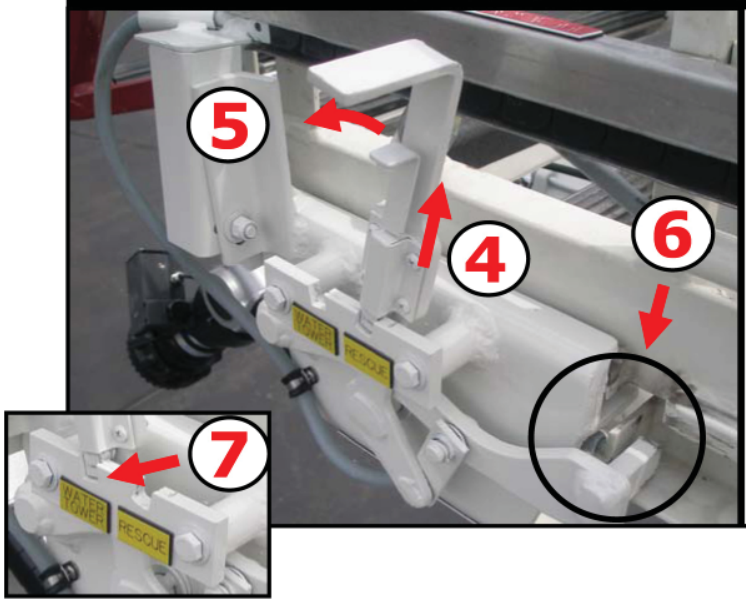
Move locking lever ***ONLY*** with aerial fully retracted. Failure to secure waterway in proper position can lead to catastrophic waterway failure and serious or fatal injury may occur.

Instructions To Switch to Rescue Mode



1. Lift locking lever and hold to unlock locking pin.
2. Slide the locking lever rearward and release to lock waterway to the lower aerial section.
3. Verify waterway pan locks are in proper position on both sides of the ladder.

Instructions To Switch to Waterway Mode



4. Lift locking lever and hold to unlock locking pin.
5. Slide the locking lever forward and release to lock waterway from lower aerial section to fly section.
6. Verify waterway pan locks are in proper position on both sides of the ladder.
7. Verify locking pin is properly seated in slot and pan locks are set properly before pressurizing waterway.

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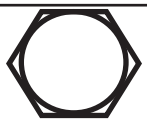
Assembly Torque Values to Produce Corresponding Bolt Loads

Size	Grade 2 			Grade 5			Grade 8		
	Clamp Load (lb)	Assembly Torque		Clamp Load (lb)	Assembly Torque		Clamp Load (lb)	Assembly Torque	
		Dry (lb)	Lub.* (lb)		Dry (lb)	Lub.* (lb)		Dry (lb)	Lub.* (lb)
4-40	250	5”	4”	380	8”	6”	540	12”	9”
4-48	275	6”	5”	420	9”	7”	600	13”	10”
6-32	375	10”	8”	580	16”	12”	820	23”	17”
6-40	420	12”	9”	640	18”	13”	920	25”	19”
8-32	580	19”	14”	900	30”	22”	1260	41”	31”
8-36	610	20”	15”	940	31”	23”	1320	41”	32”
10-24	725	27”	21”	1120	43”	32”	1580	60”	45”
10-32	825	31”	23”	1285	49”	36”	1800	68”	51”
1/4-20	1320	66”	50”	2000	8’	75”	2850	12’	9’
1/4-28	1500	76”	56”	2300	10’	86”	3250	12’	10’
5/16-18	2160	11’	8’	3350	17’	13’	4700	25’	18’
5/16-24	2400	12’	9	3700	19’	14’	5200	25’	20’
3/8-16	3200	20’	15’	4950	30’	23’	7000	45’	35’
3/8-24	3620	23’	17’	5600	35’	25’	7900	50’	35’
7/16-14	4390	32’	24’	6800	50’	35’	9550	70’	55’
7/16-20	4900	36’	27’	7600	55’	40’	10650	80’	60’
1/2-13	5850	50’	35’	9000	75’	55’	12750	110’	80’
1/2-20	6600	55’	40’	10250	90’	65’	14375	120’	90’
6/16-12	7500	70’	55’	1160	110’	80’	16375	150’	110’
9/16-18	8400	80’	60’	13000	120’	90’	18250	170’	130’
5/8-11	9350	100’	75’	14400	150’	110’	20350	220’	170’
5/8-18	10550	110’	85’	16375	180’	130’	23000	240’	180’
3/4-10	13800	175’	130’	21300	260’	200’	30100	380’	280’
3/4-16	15400	200’	150’	23800	300’	220’	3350	420’	320’
7/8-9	11450	170’	170’	29450	430’	320’	41600	600’	460’
7/8-14	12600	180’	140’	32450	470’	360’	45900	660’	500’
1-8	15000	250’	190’	38600	640’	480’	54500	900’	680’
1-12	16800	270’	210’	42300	710’	530’	59700	1000’	740’
1-14	16800	280’	210’	43400	730’	540’	61200	1020’	760’
1-1/8-7	18900	350’	270’	42300	800’	600’	68900	1280’	960’
1-1/8-12	21200	400’	300’	47500	880’	660’	77000	1440’	1080’
1-1/4-7	24000	500’	380’	53800	1120’	840’	87200	1820’	1360’
1-1/4-12	26600	550’	420’	59600	1240’	920’	96600	2000’	1500’
1-3/8-12	28600	670’	490’	64100	1460’	1100’	104000	2380’	1780’
1-3/8-12	32500	750’	560’	73000	1680’	1260’	118400	2720’	2040’
1-1/2-6	34800	870’	650’	78000	1940’	1460’	126500	3160’	2360’
1-1/2-12	39100	980’	730’	87700	2200’	1640’	142200	3560’	2660’

NOTE: When maximum torque values have been exceeded, the fastener must be replaced.
* “Lubricated” includes lubricant, lubrizing plating, and hardened washers

http://www.fandisc.com/tti.htm

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CAUTION

Always replace screws/bolts with the same grade as the original fastener.

NOTE: SAE standards require the manufacturer's logo or trademark to be included in the head pattern. Certain bolts may be marked in a similar manner and not meet the specifications set forth in these standards. Bolts purchased from distributor other than the original equipment manufacturer (OEM) should be accompanied by certification documents to ensure the integrity of the equipment is maintained.

Bolts of the same diameter may differ greatly from one another in terms of strength. Depending on the material composition and manufacturing process, the tensile strength of a bolt can vary from 64,000 psi to 180,000 psi.
The relative strength of a fastener is indicated by the head shape and standard markings designated for this purpose.
Hex head cap screws, commonly found on aerial equipment will be marked with diagonal lines, numbering from two to six.

PROPER TORQUE OF ALL SIZES AND GRADES OF BOLTS

Identification of bolt grade is always necessary. When marked as a high-strength fastener (Grade 5, Grade 8 etc), the mechanic must be aware that these are highly stressed components and must be torqued accordingly.
Special attention should be given to lubrication, plating and other factors that would dictate a deviation from the standard torque values.

TORQUE WRENCHES AND ASSOCIATED EQUIPMENT

TORQUE WRENCHES

These wrenches are precision instruments and must be handled with care to ensure proper calibration accuracy. Calibration checks should be made on a regularly scheduled basis. Whenever a torque wrench may have been over-stressed or damaged, it should be removed from service until recalibrated or replaced.
Rigid click-type torque wrenches, which have torque-limiting devices that can be preset to the required torque values are recommended.
When using the torque value chart, values close to the mid-range are recommended to allow for torque wrench calibration tolerances. Erratic or jerking motion of the wrench can easily result in excessive torque values. Always use slow, even wrench movements and stop when the predetermined value has been reached.

ASSOCIATED EQUIPMENT

Certain accessories used in conjunction with the torque wrench enable maintenance personnel to properly service the stressed fasteners encountered on aerial device. The proper use of these tools and their intended application are outlined in the following paragraphs.

NOTE: A torque multiplier increases the output force of the socket by approximately four times the value that is introduced by the torque wrench. Factoring the torque value typically one-fourth the desired manufacturer's instructions for the specific torque multiplier.

Torque multiplier provide the maintenance personnel with fastener-tightening power that requires approximately one-fourth the force required using conventional tools. They provide safe, convenient tightening power when confronted with the need for high-torque values within a limited amount of working or leverage space.

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75T309 RBA Demo - 75' 3 Section Rear Mount Straight-Stick

# of Outriggers: 2 | **# of Sections:** 3 | **Unit Type:** Rear Mount | **Date Filled In:** 31-Oct-13

Truck #: 75T309 | **Ladder Size:** 75' | **Ladder Type:** Straight-Stick | **Filled In By:** DW Groh

City Name: RBA Demo | **OEM Contractor:** Rosenbauer South Dakota | **Chassis Type:**

3 Port 18 Wire Aerial Options Swivel

WIRE AWG	Swivel Wire No.	R.K. Wire Number
10	1	52 (1)
10	2	52 (2)
10	3	52 (3)
10	4	1A
10	5	1B
10	6	1C
10	7	AC SPARE
10	8	AC SPARE
10	9	AC SPARE
10	10	AC SPARE
12	11	AC SPARE
12	12	AC SPARE
12	13	14
12	14	15A
12	15	15B
12	16	18
12	17	41
12	18	spare
12	19	spare
12	20	spare
14	21	spare
14	22	spare
14	23	spare
14	24	spare
14	25	
14	26	
14	27	
14	28	
14	29	
14	30	
14	31	
14	32	
16	33	
16	34	
16	35	
16	36	

Top of Swivel to Turntable Deutsch 16 Pin Color:

Deutsch Pin	R.K. Wire Number	Swivel Wire No.
A	52 (1)	1
B	52 (2)	2
C	52 (3)	3
D	1A	4
E	1B	5
F	1C	6
G	14	13
H	15A	14
J	15B	15
K	18	16
L	41	17
M		
N		
P		
R		
S		
110V RELAY		0

Note: 18-18 cord, 15-18 not used.

Notes & Revisions:

Deutsch 16 Pin Color:

Deutsch Pin	R.K. Wire Number	Swivel Wire No.
A		
B		
C		
D		
E		
F		
G		
H		
J		
K		
L		
M		
N		
P		
R		
S		

From Turntable to Platform & Base Section 12 Pin Deutsch Color: Yellow

Deutsch Pin	R.K. Wire Number	To Base	To Platform
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

Base Section 6-Pin Deutsch

1	19	X	
2	20	X	
3			
4			
5	52	X	
6	52	X	
7			
8			

From Turntable to Aerial Deutsch 21 Color: Red

Deutsch Pin	R.K. Wire Number	Ladder Base	Ladder Tip	Platform	12 AWG/COND. 5	18 AWG/COND.18	Gauge ___COND.
A 1	19	X					14/ORG
B 2	1A		X		1		
C 3	-						
D 4	52		X		4		
E 5	52		X		5		
F 6	52	X					14/GRN
G 7	21/121		X		2		
H 8	53		X			7	
J 9	54		X			8	
K 10	55		X			1	
L 11	56		X			2	
M 12	57		X			3	
N 13	58		X			4	
P 14	59		X			5	
R 15	60		X			6	
S 16						9	
T 17						10	
U 18						11	
V 19						12	
W 20						13	
X 21						14	

Additional Deutsch

1								
2								
3								
4								
5								
6								

From Turntable to Deutsch 12 Color: Blue

Deutsch Pin	R.K. Wire Number	Ladder Base	Ladder Tip	Platform	16 AWG/COND. 12	18 AWG/COND.18	Gauge ___COND.
A 1							
B 2							
C 3							
D 4							
E 5							
F 6							
G 7							
H 8							
J 9							
K 10							
L 11							
M 12							
N 13							
P 14							
R 15							
S 16							
T 17							
U 18							
V 19							
W 20							
X 21							

Additional Deutsch

1								
2								
3								
4								
5								
6								

From Turntable to Deutsch 2 3 6 8 12 16 21 Color: Red Blue Brown Yellow Orange White Black

Deutsch Pin	R.K. Wire Number	Ladder Base	Ladder Tip	Platform	16 AWG/COND. 12	18 AWG/COND.18	Gauge ___COND.
A 1							
B 2							
C 3							
D 4							
E 5							
F 6							
G 7							
H 8							
J 9							
K 10							
L 11							
M 12							
N 13							
P 14							
R 15							
S 16							
T 17							
U 18							
V 19							
W 20							
X 21							

Additional Deutsch

1								
2								
3								
4								
5								
6								

Schematics List	Dwg No	Dwg No	Dwg No	Dwg No	Dwg No	Dwg No	Dwg No
AC Circuits	N/A						
Intercom	1087620						
Flow Meter	1017250						
Air Alarm	N/A						
Turntable/Ladder	1019666 (2 shts)	1019980	1011240				
Tip/Platform/Monitor	1011261	1017240	1019960				

Left Side of Ladder

#	E-Chain Size	Length
	IGUS 10-1	12'
	IGUS 10-4	
	IGUS 10-6	
	IGUS 11-2	
	IGUS 11-2	

#	Rope Size	Length
1	14-2 Conductor	
	7 Conductor	
	12 AWG - 3 Conductor	
1	16 AWG - 12 Conductor	32' 6"
	Air Hose	
	Hydraulic Hose	
	4 AWG - Hot (RED)	
	4 AWG - Ground (BLK)	

Right Side of Ladder

#	E-Chain Size	Length
	IGUS 10-1	
1	IGUS 10-4	
	IGUS 10-6	
	IGUS 11-2	
	IGUS 11-2	

#	Rope Size	Length
	12 AWG - 3 Conductor	
	14 AWG - 7 Conductor	
	16 AWG - 12 Conductor	
1	18 AWG - 18 Conductor	87'
	Air Hose	
1	12 AWG - 5 Cond.	87'
	8 Cond. David Clark	

Color Legend
Blue - BL
Brown - BR
Red - RED
Yellow - YEL
Orange - ORG
White - WH
Black - BLK
Green - GR

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Sheet 'Lower Connections' of 'Electrical Master -RBA Demo - 75T309 Released 2013-12-02.xls'

Outrigger Box to Front Outriggers
Rectangular Deutsch
12 Pins
Color:

Deutsch Pin	R.K. Wire Number	Left Front Outrigger	Right Front Outrigger	Outrigger Light
A	1	5A		Both
B	2	-		
C	3 ~~52~~		X	
D	4 ~~25~~	X		
E	5 ~~175~~		X	
F	6 ~~1E~~			
G	7 ~~STWD~~			
H	8 ~~174~~	X		
J	9 ~~23~~		X	
K	10 ~~62~~	X	X	
L	11 5	X	X	
M	12 -			

Outrigger Box to Rear Outriggers
Rectangular Deutsch
12 Pins
Color:

Deutsch Pin	R.K. Wire Number	Left Rear Outrigger	Right Rear Outrigger	Outrigger Light
A	1 5A			Both
B	2 -			
C	3 52	X	X	
D	4 29	X		
E	5 177		X	
F	6 1E			
G	7 STWD			
H	8 176	X		
J	9 27		X	
K	10 52	X	X	
L	11 5	X	X	
M	12 -			

Outrigger Box to Chassis
Round Deutsch
21 pins
Color:

Deutsch Pin	R.K. Wire Number	Ladder Bed	Diverter	Horn	Front of Truck
A	1 52		X		
B	2 1E				X
C	3 117		X		
D	4 5A	Body Builder Use			
E	5 5A				
F	6 115		X		
G	7 52				
H	8 18				X
J	9 4				X
K	10 -				
L	11 6			X	
M	12 52			X	
N	13 5	X			
P	14 6	X			
R	15 7	X			
S	16 9	X			
T	17				
U	18				
V	19				
W	20				
X	21 42				X

Outrigger Box to Swivel
Round Deutsch
16 pins
Color:

Deutsch Pin	R.K. Wire Number	Swivel Wire Number
A	1 52 (1)	1
B	2 52 (2)	2
C	3 52 (3)	3
D	4 1A	4
E	5 1B	5
F	6 1C	6
G	7 14	13
H	8 15A	14
J	9 15B	15
K	10 18	16
L	11 41	17
M	12	
N	13	
P	14	
R	15	
S	16	

Swivel to Chassis
Rectangular Deutsch
2 pin
Color:

Deutsch Pin	R.K. Wire Number	Swivel Wire Number
A	1	
B	2	
C	3	

Pump Panel to Chassis
Rectangular Deutsch
6 Pin
Color:

Deutsch Pin	R.K. Wire Number	Swivel	Outrigger Box	Intercom Audio	Intercom Power
A	1 5A		X		BLK
B	2 52		X	WHT	WHT
C	3 53	X		GRN	
D	4 54	X		BLK	
E	5 -				
F	6 -				
G	7				
H	8				
J	9				
K	10				
L	11				
M	12				
N	13				
P	14				
R	15				
S	16				
T	17				
U	18				
V	19				
W	20				
X	21				

Outrigger Box to Self-Leveling
Round Deutsch
21 pins
Color:

Deutsch Pin	R.K. Wire Number	Function
A	1 FBY	Front to Back - Yellow
B	2 52	Ground to Valves
C	3 FBG	Front to Back - Green
D	4 117	Power to Outrigger Switches
E	5 117	Power to Outrigger Switches
F	6 FB-RED	Power to FB Pendulum
G	7 52	Ground to Valves
H	8 SSY	Side to Side - Yellow
J	9 SSG	Side to Side - Green
K	10 SS-RED	Power to SS Pendulum
L	11 61	Right Rear Lower Jack
M	12 62	Left Rear Lower Jack
N	13 63	Right Rear Raise Jack
P	14 64	Left Rear Raise Jack
R	15 91	Right Front Lower Jack
S	16 92	Left Front Lower Jack
T	17 93	Right Front Raise Jack
U	18 94	Left Front Raise Jack
V	19	
W	20	
X	21	

Notes
STWD is Outrigger Stowed signal from proxes.
Drawing 1019877 has been superseded by drawing 101987B. (Updated 6/9/14 by AJF.)

Drawings
101987B (1019870) Dillblox Drawing
1026770 (Outrigger Stowed - New Harness)
1019869 (1019860) (OUTRIGGER FUNCTIONAL)
1019955 (REAR ONLY OUTRIGGER HARNESS)

1026680 (JACK WIRING)

City Name: RBA Demo	
OEM Contractor: Rosenbauer South Dakota	**Truck #:** 75T309
Chassis Type:	**Ladder Size:** 75'
# of Outriggers: 2	**Ladder Type:** Straight-Stick
# of Sections: 3	**Filled In By:** DW Groh
Unit Type: Rear Mount	**Date Filled In:** 31-Oct-13

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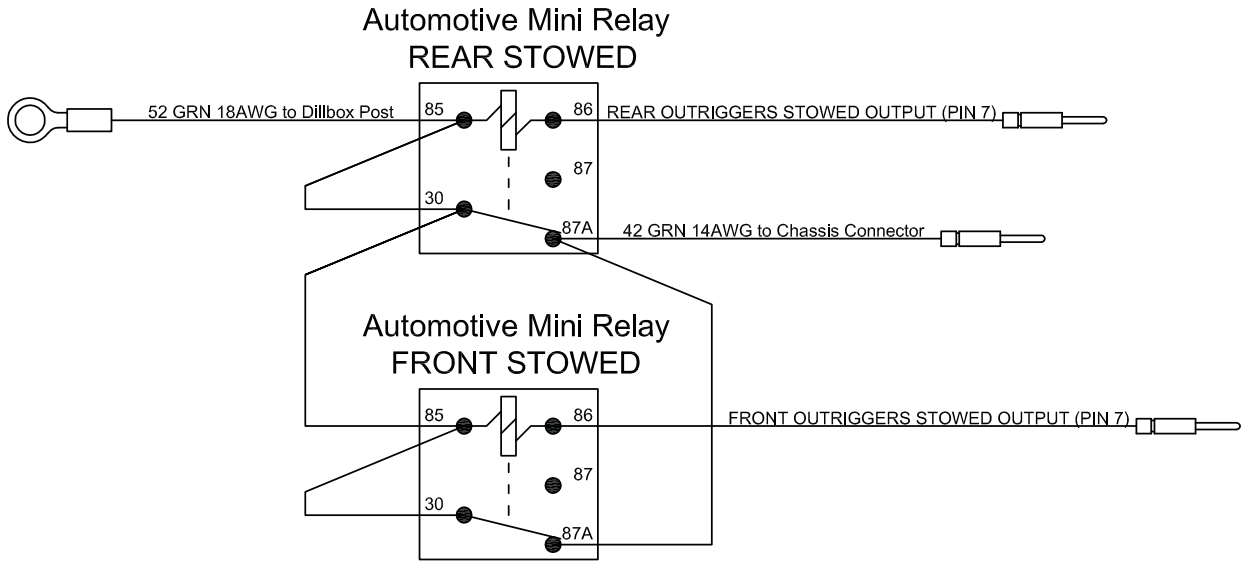
REVISIONS				
REV	DRAFTER	DESCRIPTION	DATE	EFF. UNIT
1	CMM	Top Relay 30 Post was missing 52 connection.	24 JAN 2008	
2	DWG	Titleblock Updated	16 Feb 2012	
3	DWG	Titleblock Updated	18 Apr 2012	

Outrigger Stowed Relays
Located in Outrigger Electrical Box
Rear of Truck



NOTES:
1. See Electrical Master for connector pin assignments not shown here.
2. Wire 52 from relays may join with other relays before going to dillblox post.
3. Front Outrigger Stowed Relay wiring will not exist if no front outriggers exist.
4. Wire 42 is grounded when any outrigger is NOT stowed. Other systems may also ground wire 42 to indicate other items not stowed.

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Drawing Classification: ELEC DWG
Category: OUTRIGGER
Status: Dr. Assy / Platform Assy / Final Finish / Elec - Main / Elec - Chas Prep / Elec - Main # 2

ITEM	PART #	DESCRIPTION	QTY.
ITEM	PART #	DESCRIPTION	QTY.

ROSENBAUER AERIALS, LLC.
870 SOUTH BROAD STREET FREMONT, NE 68025 (402) 721-7622

TITLE: Outrigger Stowed With New Harness

TOLERANCE	
FRACTIONAL	1/16"
DECIMAL	0.005"
DRILL HOLE	1/64"
ANGULAR	0.5°

SIZE: A | PATH: Z:\STANDARDS\05 ELE\SCHEMATICS\OUTRIGGERS\ | DWG NO.: 1026770 | REV: 3
DATE: 23 JAN 2008 | SHEET: 1 OF 1 | ENG: CM MORRIS

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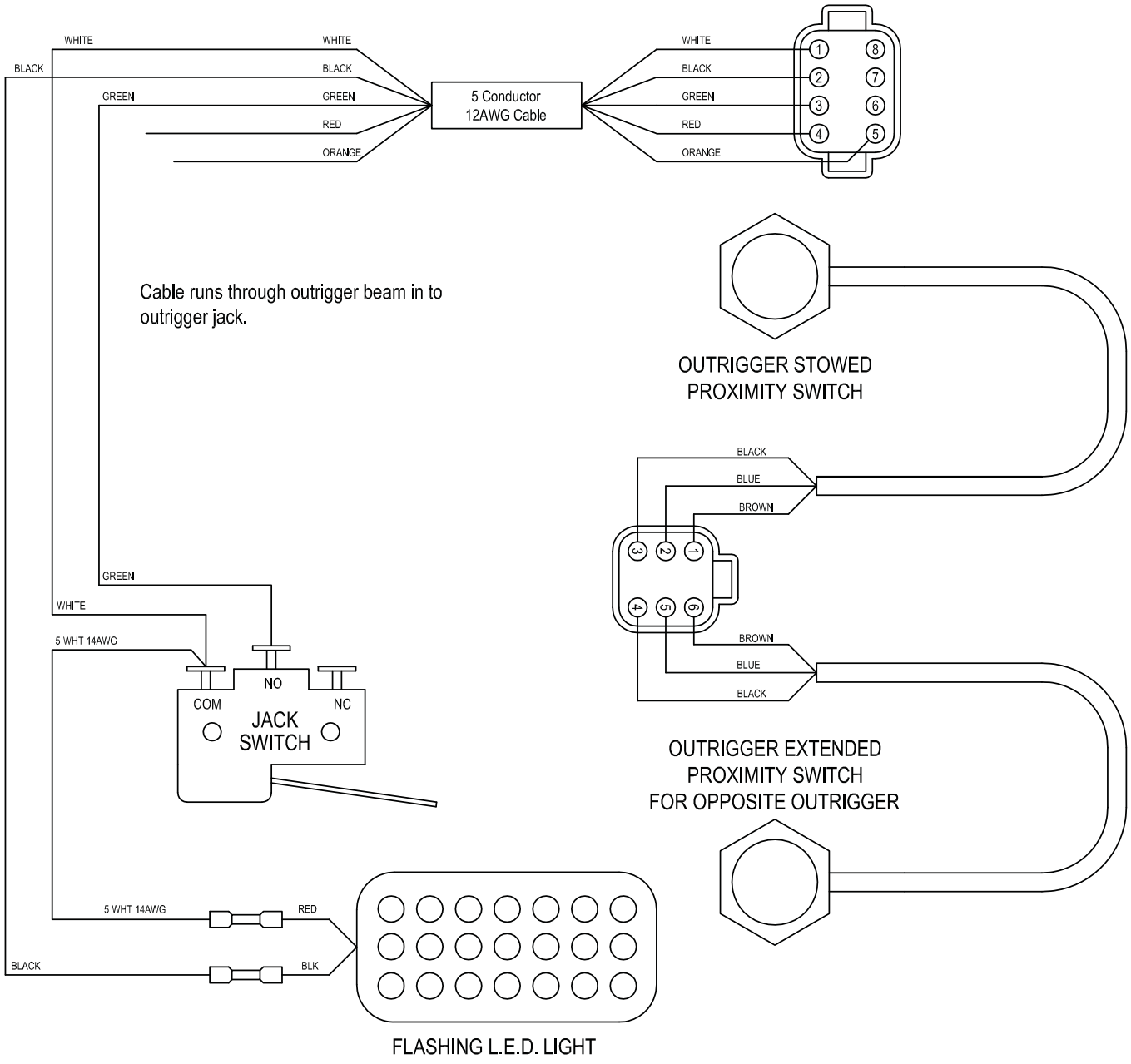
REVISIONS				
REV	DRAFTER	DESCRIPTION	DATE	EFF. UNIT
1	DWG	Titleblock Updated	24 Feb 2012	



NOTES:
1. Connectors to be located directly behind service cover on each outrigger.
2. Proxes service other side outrigger!

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ITEM	PART #	DESCRIPTION	QTY.
ITEM	PART #	DESCRIPTION	QTY.

ROSENBAUER AERIALS, LLC.
870 SOUTH BROAD STREET FREMONT, NE 68025 (402) 721-7622

TITLE: OUTRIGGER AND JACK WIRING

Drawing Classification: ELEC DWG
Category: OUTRIGGER
Books: Elec - Main, Elec - Chas Prep, Lit Assm, Hardcom Assm

TOLERANCE	
FRACTIONAL	1/16"
DECIMAL	0.005"
DRILL HOLE	1/64"
ANGULAR	0.5°

SIZE: A | PATH: Z:\STANDARDS\05 ELE\SCHEMATICS\OUTRIGGERS\ | DWG NO.: 1026680 | REV: 1
DATE: 14 DEC 2007 | SHEET: 1 OF 1 | ENG: CM MORRIS

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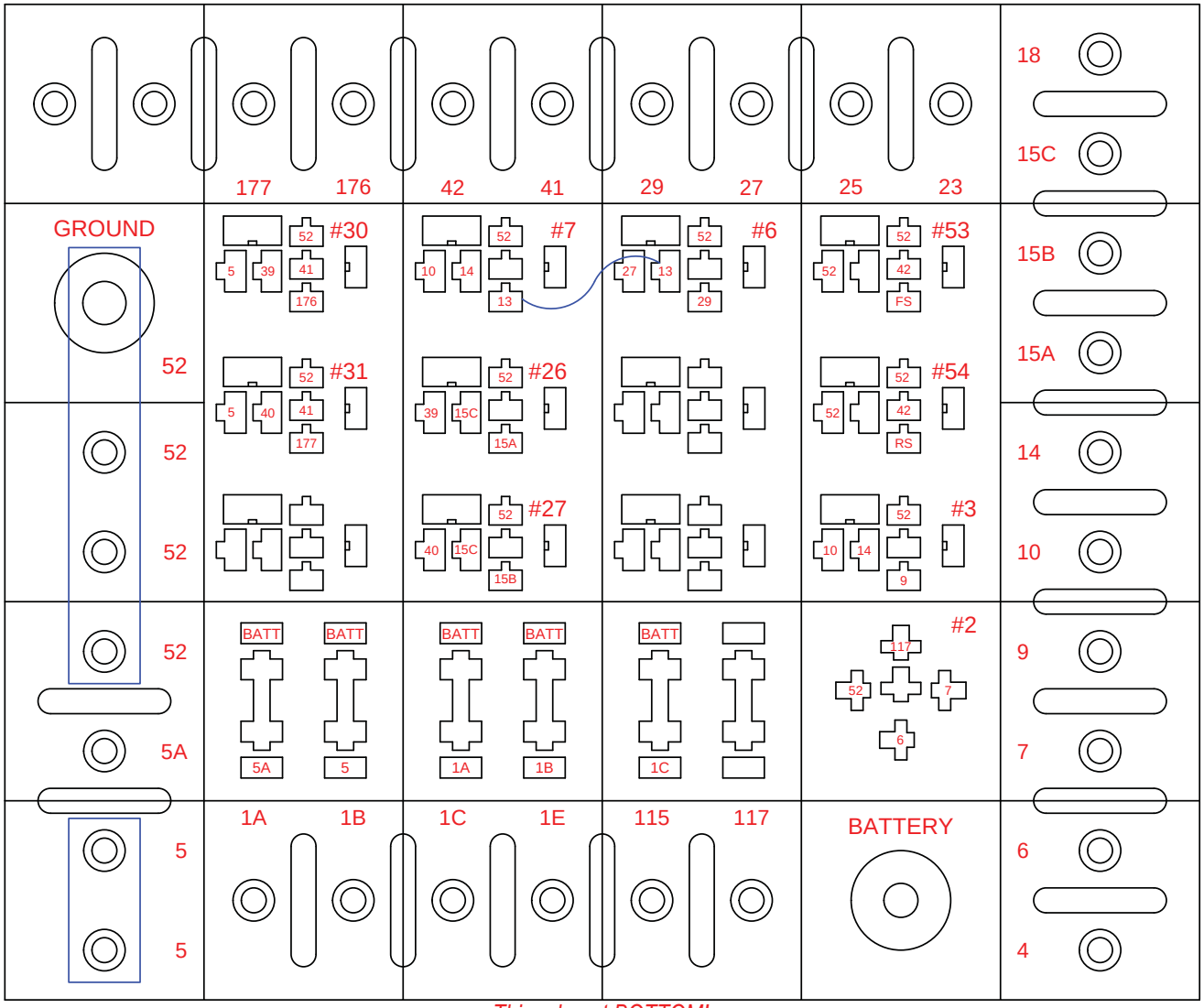
REVISIONS				
REV	DRAFTER	DESCRIPTION	DATE	EFF. UNIT
0	AJF	Drawing released.	6/9/14	--

THIS BOARD IS LOCATED BEHIND OUTRIGGER SWITCH PANEL AT THE REAR OF THE TRUCK



This edge at BOTTOM!

This is a view of the BACK side of this board! When viewed from FRONT, GROUND/52 posts appear on right side.

NOTES:

1. Trucks with Rear Primary Controls may not utilize this drawing. Check unit's electrical mastersheet for specified assembly.
2. STWD RS is Rear Outrigger Stowed Signal.
3. Ground bus bar detailed on 1009100.
4. NOT for use on Smart-Trucks!
5. Actual orientation and layout may vary as determined by electricians! Terminals may be moved.

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Drawing Classification: ELEC DWG
Category: OUTRIGGER
Books: Ldr Assy, Platform Assy, Final Finish, Elec - Main, Elec - Chas Prep, Elec - Main # 2

ITEM	PART #	DESCRIPTION	QTY.
ITEM	PART #	DESCRIPTION	QTY.

ROSENBAUER AERIALS, LLC.
870 SOUTH BROAD STREET FREMONT, NE 68025 (402) 721-7622

TITLE: DILLBLOX ASSEMBLY - OUTRIGGER ELECTRICAL PANEL
2 Jacks with Hard Short-Set

TOLERANCE	
FRACTIONAL	1/16"
DECIMAL	0.005"
DRILL HOLE	1/64"
ANGULAR	0.5°

SIZE: A
PATH: Z:\STANDARDS\05 ELE\DILLBLOX\OUTRIGGER\
DWG NO.: 101987B
REV: --
DATE: 9 JUNE 2014
SHEET: 1 OF 1
ENG.: CM MORRIS

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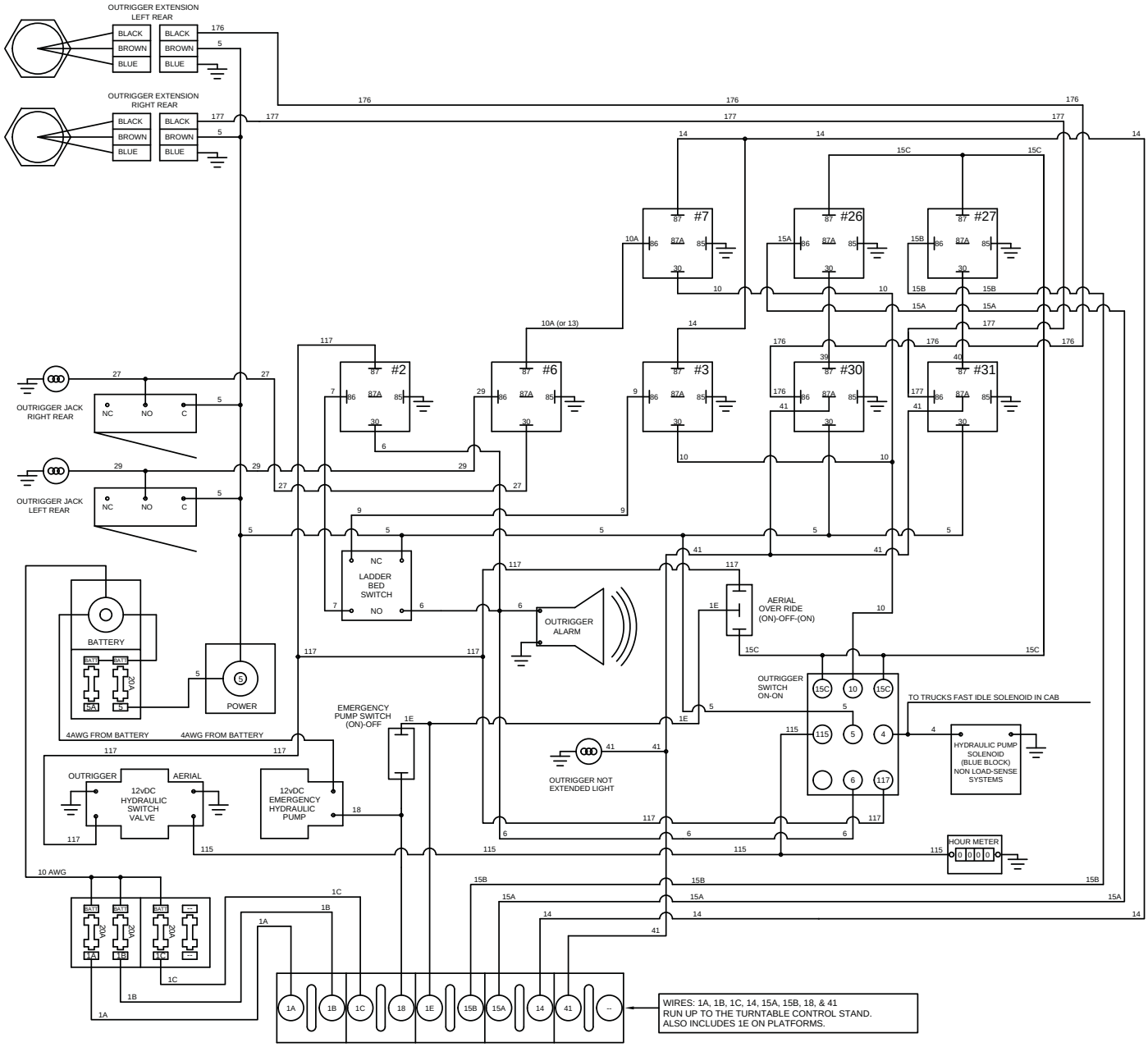
REVISIONS				
REV	DRAFTER	DESCRIPTION	DATE	EFF. UNIT
	CMM	Derived from and replaces 1019862, relay #2 now connects wire 6 with wire 117 when 7 hot, override switch now powered by 1E, pushes 117 for OR override, 117 now causes high idle via OR switch, instead of 6.	14 MAR 2013	



NOTES:

1. Not for use with Smart-Trucks!
2. Refer to Unit's Electrical Mastersheet for Connector Wiring Pin Assignments.
3. 1E wire is power coming from CAB, protection supplied by body builder.

ITEM	PART #	DESCRIPTION	QTY.
ITEM	PART #	DESCRIPTION	QTY.

ROSENBAUER AERIALS, LLC.
870 SOUTH BROAD STREET FREMONT, NE 68025 (402) 721-7622

TITLE: ELECTRICAL SCHEMATIC - OUTRIGGER ELECTRICAL PANEL 2 OUT-DN STANDARD V-2013

Drawing Classification: ELEC DWG
Category: OUTRIGGER
Options: Ldr. Assy, Platform Assy, Final Finish, Elec - Main, Elec - Chas Prep, Elec - Main # 2

TOLERANCE		SIZE	PATH	DWG NO.	REV
FRACTIONAL	1/16"	A	Z:\STANDARDS\05 ELE\SCHEMATICS\OUTRIGGERS\	1019869	0
DECIMAL	0.005"				
DRILL HOLE	1/64"				
ANGULAR	0.5°				

DATE	SHEET	ENG.
15 MAR 2013	1 OF 1	CM MORRIS

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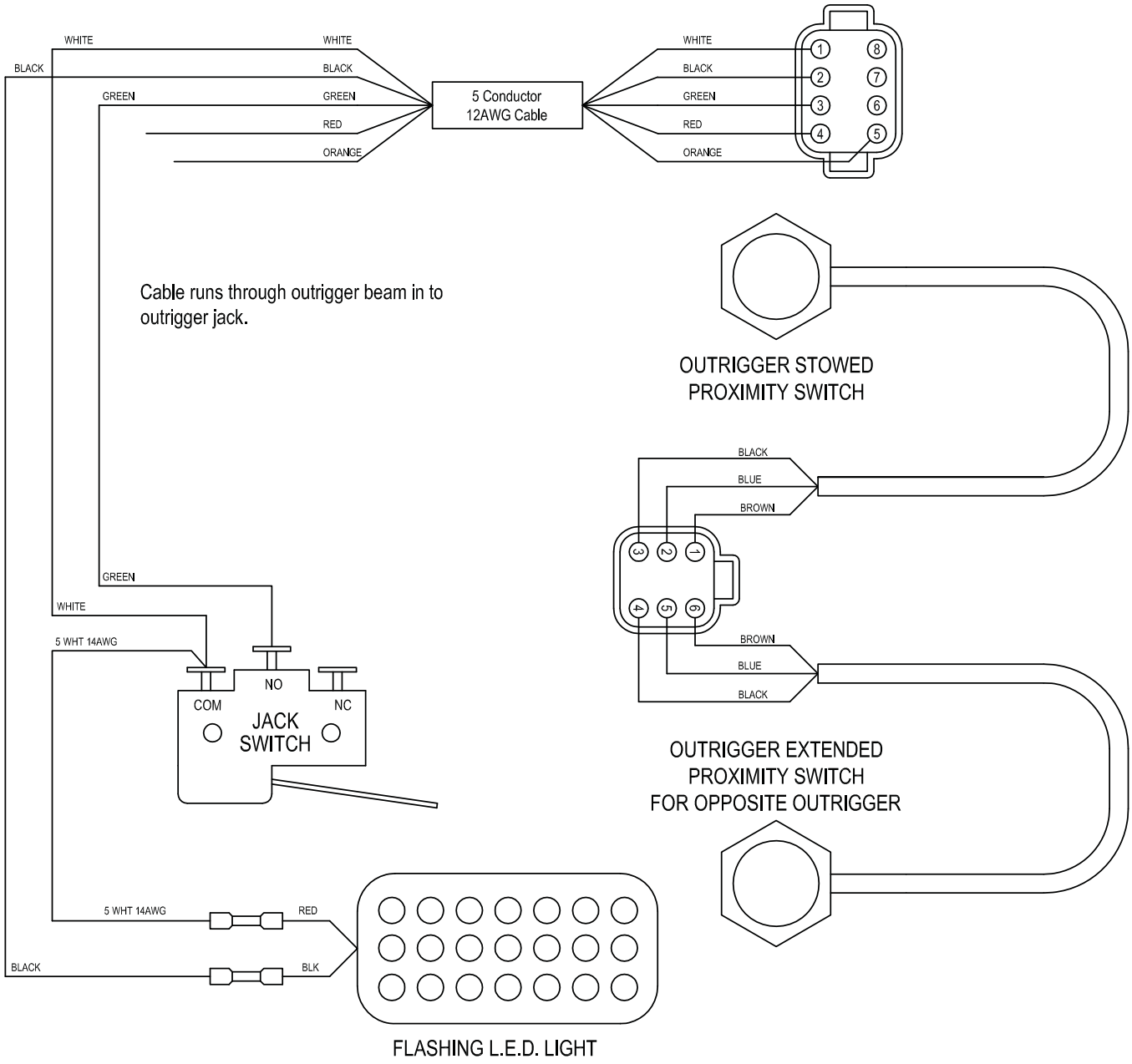
REVISIONS				
REV	DRAFTER	DESCRIPTION	DATE	EFF. UNIT
1	DWG	Titleblock Updated	24 Feb 2012	



NOTES:
1. Connectors to be located directly behind service cover on each outrigger.
2. Proxes service other side outrigger!

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ITEM	PART #	DESCRIPTION	QTY.
ITEM	PART #	DESCRIPTION	QTY.

Drawing Classification: ELEC DWG
Category: OUTRIGGER
Books: Last Assm / Mid Assm / Elec - Main / Elec - Chas Prep

ROSENBAUER AERIALS, LLC.
870 SOUTH BROAD STREET FREMONT, NE 68025 (402) 721-7622

TITLE: OUTRIGGER AND JACK WIRING

TOLERANCE		SIZE	PATH	DWG NO.	REV
FRACTIONAL	1/16"	A	Z:\STANDARDS\05 ELE\SCHEMATICS\OUTRIGGERS\	1026680	1
DECIMAL	0.005"				
DRILL HOLE	1/64"				
ANGULAR	0.5°				

DATE: 14 DEC 2007 | SHEET: 1 OF 1 | ENG.: CM MORRIS

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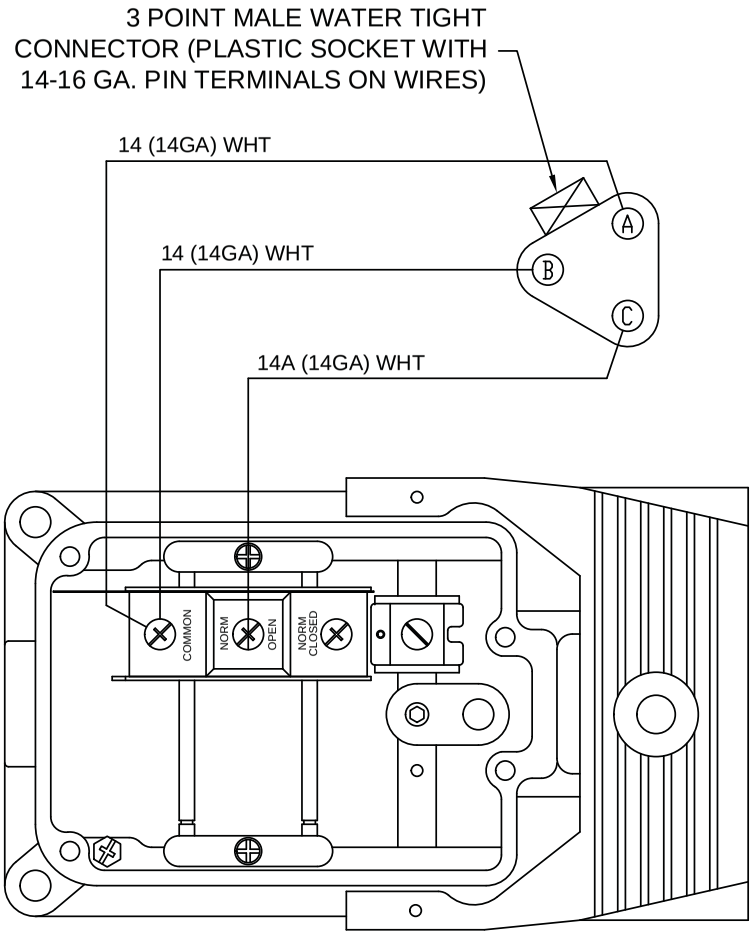
REVISIONS				
REV	DRAFTER	DESCRIPTION	DATE	EFF. UNIT
1	RMW	14 ON RIGHT TERMINAL A WAS LABELED 14A - ERROR	06 OCT 06	
2	CMM	Updated TB for books, removed mating connection	20 JAN 2009	
3	DWG	Updated TB for books	16 FEB 2012	



NOTES:

1. DEVELOPED FROM Z:\STANDARDS\ELECTRICAL\TURNTABLES\STANDARD SWITCHES\FOOT-SWITCH.DWG

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Drawing Classification: ELEC DWG
Category: CONTROLS -MISC
Books: ■ Elec - Main ☐ Elec - Chas Prep ☐ Ldr Assm ☐ Platform Assm

ITEM	PART #	DESCRIPTION	QTY.
ITEM	PART #	DESCRIPTION	QTY.

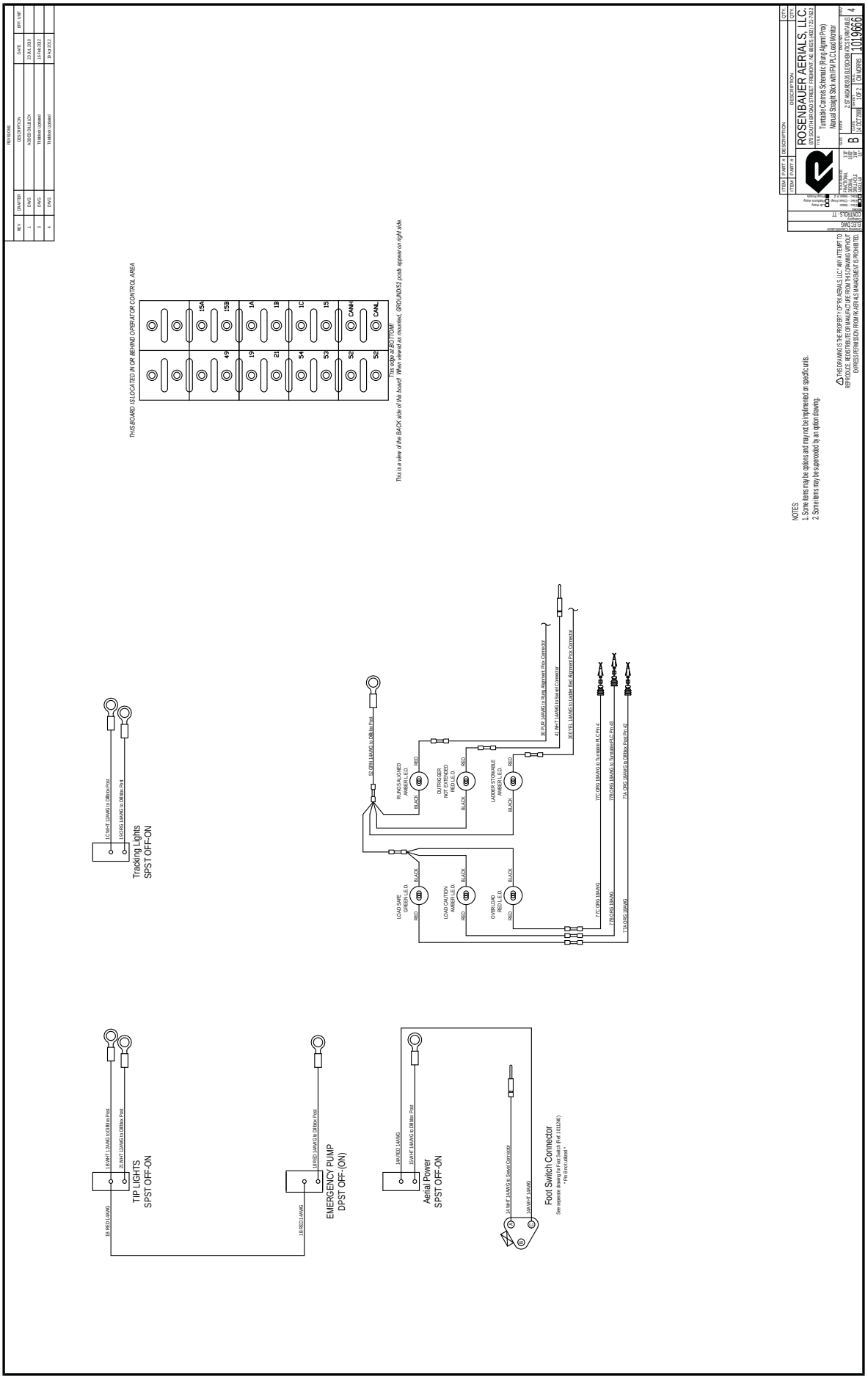
ROSENBAUER AERIALS, LLC.
870 SOUTH BROAD STREET FREMONT, NE 68025 (402) 721-7622

TITLE: ELEC SCHM - FOOT SWITCH

TOLERANCE		SIZE	PATH	DWG NO.	REV
FRACTIONAL	1/16"	A	Z:\STANDARDS\05 ELE\SCHEMATICS\MISC CTLS\	1011240	3
DECIMAL	0.005"				
DRILL HOLE	1/64"				
ANGULAR	0.5°				

DATE	SHEET	ENG.
29 AUG 2006	1 OF 1	SLB

75T309 (7365)


REVISIONS
REV | DR/APTR | DESCRIPTION | DATE | APP. CHK'
1 | DWG | ADDED DIA.BLOCK | 23 JUL 2010 |
3 | DWG | THMbrok Updated | 19 Feb 2012 |
4 | DWG | THMbrok Updated | 30 Apr 2012 |
ITEM | PART # | DESCRIPTION | QTY.
ROSENBAUER AERIAL, LLC.
611 SOUTH BROAD STREET FREMONT, NE 68025 (402) 727-7822
TITLE: Turntable Controls Schematic (Rung 4)ymm Pmo)
Manual Straight Stick with PM Pt.C Load Monitor
DWG NO: 75T-INSPROSBSESCSH-1 REV: 4
SCALE: NONE WEIGHT: SHEET 1 OF 2
CM NUMBER: 1019666
DATE: 04 OCT 2008
B
NOTES:
1. Some items may be options and may not be implemented on specific units.
2. Some items may be superceded by an option drawing.
THIS BOARD IS LOCATED IN OR BEHIND OPERATOR CONTROL AREA
This is a view of the BACK side of the board. When viewed as mounted, GROUND#2 posts appear on right side.
This edge is BOTTOM
15A
15B
1A
1B
1C
15
CANH
CANL
49
19
21
54
53
52
52
Tracking Lights
SPST OFF-ON
1.0 WHT 12AWG to DMbkv Post
2.5 ORG 16AWG to DMbkv Rng
TIP LIGHTS
SPST OFF-ON
1.5 WHT 14AWG to DMbkv Post
23 WHT 22AWG to DMbkv Post
EMERGENCY PUMP
DPST OFF-(ON)
18 RED 14AWG
18 RED 14AWG
Aerial Power
SPST OFF-ON
14 RED 14AWG
15 WHT 14AWG to DMbkv Post
Foot Switch Connector
See separate drawing 75T-INSPROSBSESCSH-1 Pnt 4 (11234)
** Pin 8 not utilized **
44 WHT 14AWG to Shield Connector
44A WHT 24AWG
92 ORN 14AWG to DMbkv Post
RUNGS ALIGNED
AMBER L.E.D.
OUTRIGGER
NOT STOWED
RED L.E.D.
LADDER STOWABLE
AMBER L.E.D.
LOAD SAFE
GREEN L.E.D.
LOAD CAUTION
AMBER L.E.D.
OVERLOAD
RED L.E.D.
BLACK
RED
30 BLK 14AWG to Rung Alignment Pmo Connector
41 WHT 14AWG to Shield Connector
20 YEL 14AWG to Ladder Bed Alignment Pmo Connector
77C ORG 18AWG
77B ORG 18AWG
77A ORG 18AWG
77C ORG 18AWG to Turntable PL-CPm 4
77B ORG 18AWG to Turntable PL-CPm 4B
77A ORG 18AWG to DMbkv Post Pin 42
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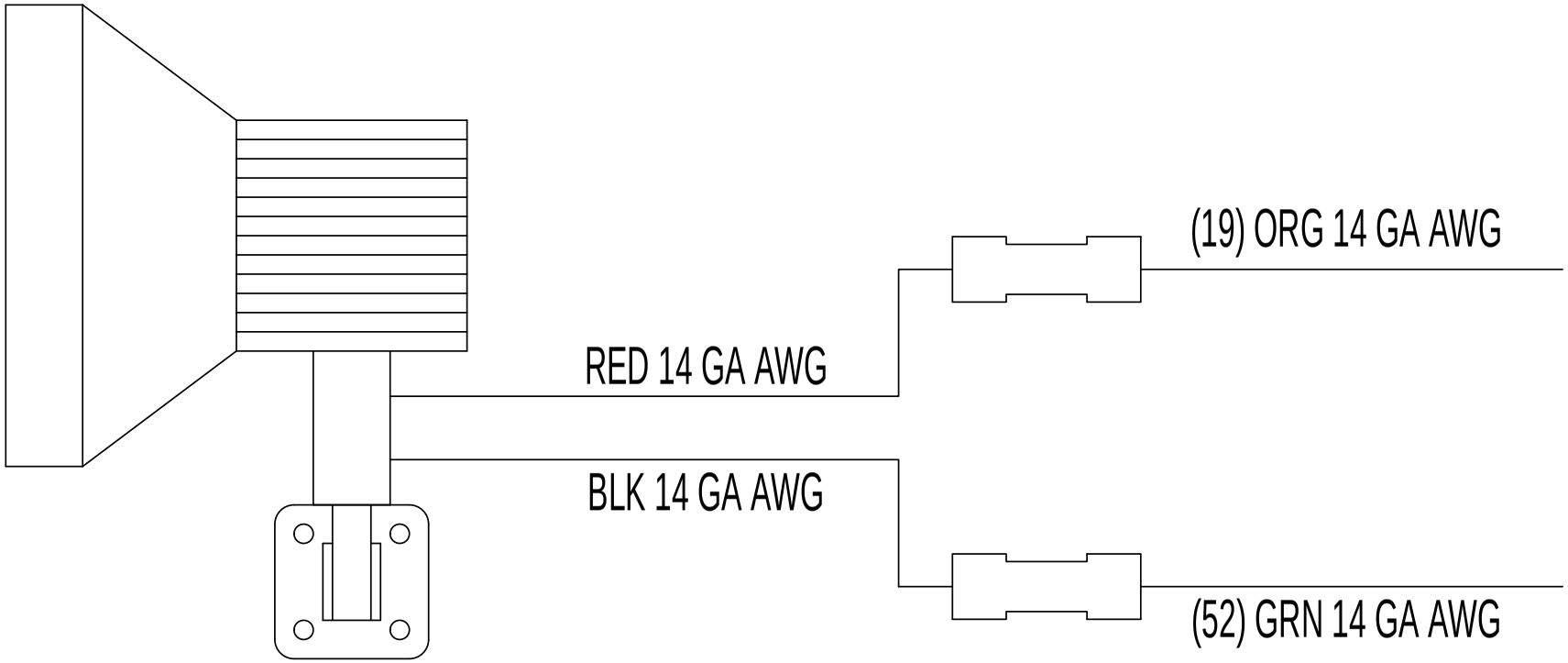
75T309 RBA Demo

REVISIONS				
REV	DRAFTER	DESCRIPTION	DATE	EFF. UNIT
0	--	Drawing released.	--	--
1	DWG	Title Block Updated	29 Dec 2011	



NOTES:
1. CAD DRAWING. DO NOT SCALE. WORK FROM DIMENSIONS AND REPORT ERRORS.
2. DIMENSIONS IN PARENTHESES ( ) DENOTE REFERENCE ONLY DIMENSION.
3. CNC BURN PROGRAM #
4. CNC MILL PROGRAM #

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Drawing Classification: ELEC DWG
Category: TURNTABLE
Books: ■ Elec - Main ☐ Elec - Chas Prep ■ Ldr Assm ☐ Platform Assm

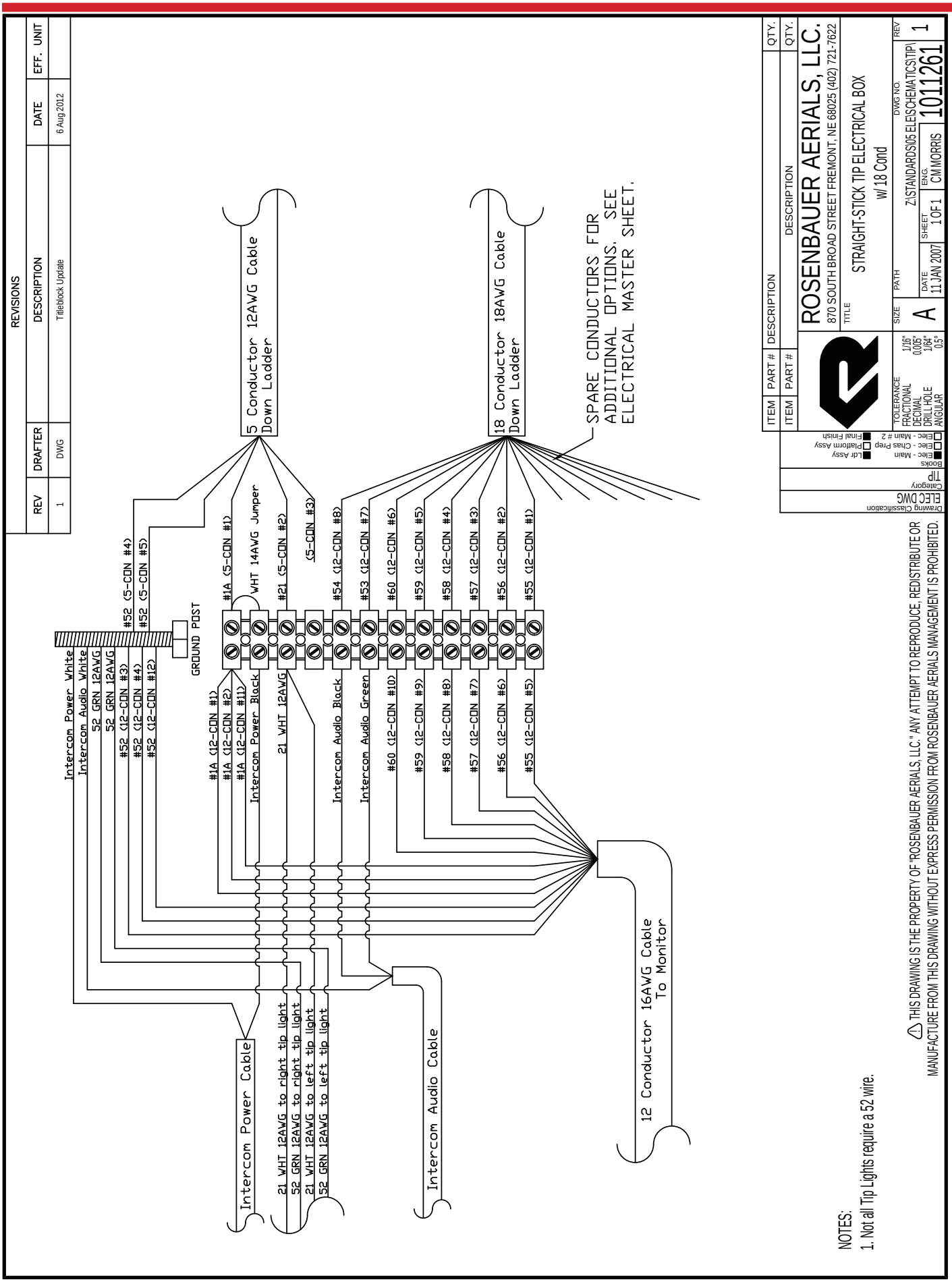
ITEM	PART #	DESCRIPTION	QTY.
ITEM	PART #	DESCRIPTION	QTY.

ROSENBAUER AERIALS, LLC.
870 SOUTH BROAD STREET FREMONT, NE 68025 (402) 721-7622

TITLE
ELECTRICAL SCHEMATIC
TRACKING LIGHT CONNECTIONS (COLLINS FX 12)

TOLERANCE		SIZE	PATH	DWG NO.	REV
FRACTIONAL	1/16"	A	Z:\STANDARDS\05 ELE\SCHEMATICS\12 VOLT LIGHTS\	1019980	1
DECIMAL	0.005"				
DRILL HOLE	1/64"		DATE: 19 Sept 2006	SHEET: 1 OF 1	ENG.: SLB
ANGULAR	0.5°				

75T309 (7365)



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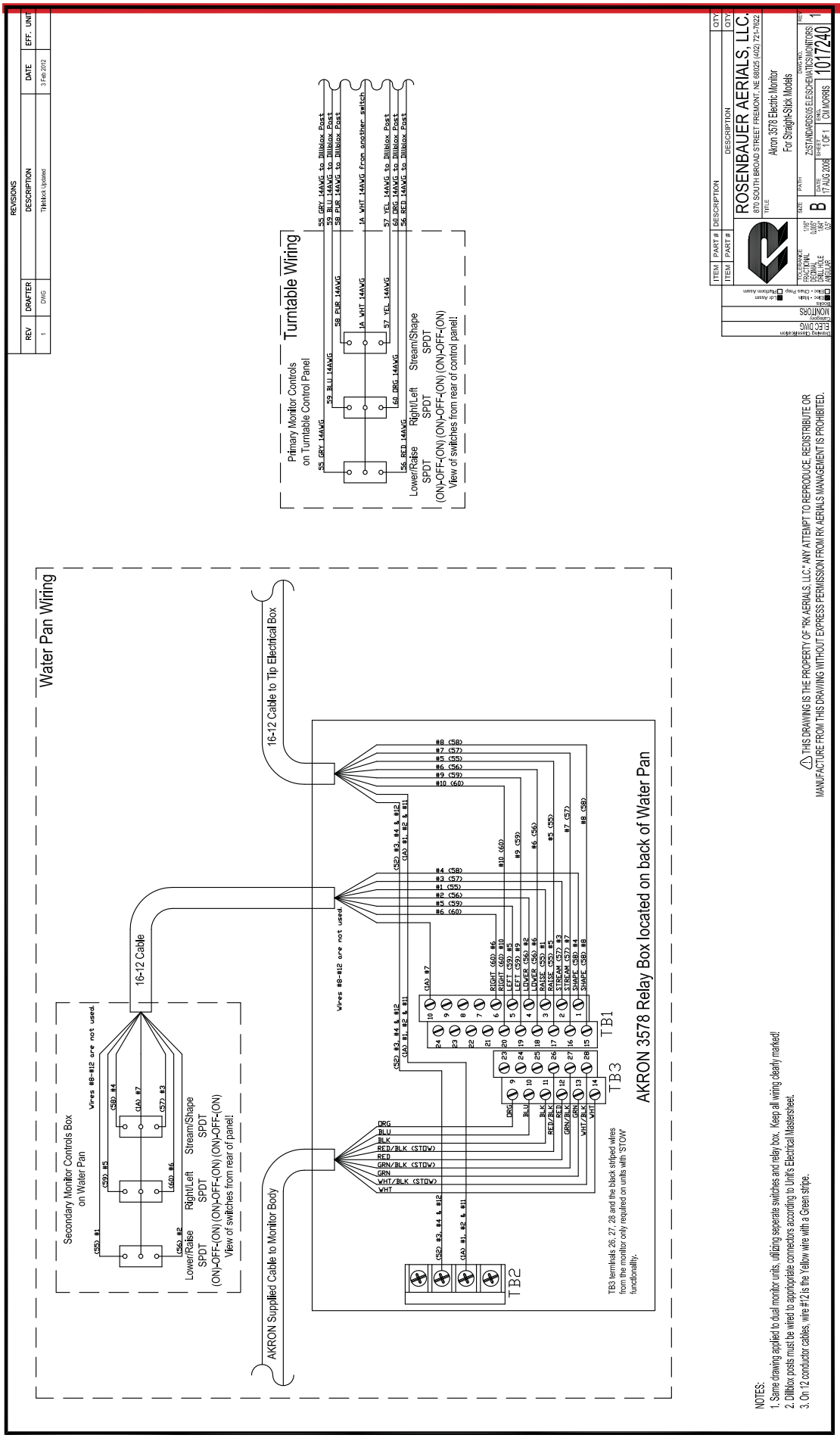

REVISIONS				
REV	DRAFTER	DESCRIPTION	DATE	EFF. UNIT
1	DWG	Tiltlock Updated	3 Feb 2012	

ITEM	PART #	DESCRIPTION	QTY.
ITEM	PART #	DESCRIPTION	QTY.

ROSENBAUER AERIALS, LLC.
870 SOUTH BROAD STREET FREMONT, NE 68025 (402) 721-1922

TITLE: Akron 3578 Electric Monitor For Straight-Stick Models

SIZE: B | PATH: | DWG NO: 75ST-IND-ARO-035 ELEC-SCHEMATICS-MONITORS | REV: 1

DATE: 17 AUG 2009 | SHEET: 1 OF 1 | CM MORRIS | 1017240

NOTES:
1. Same drawing applied to dual monitor units, utilizing seperate switches and relay box. Keep all wiring clearly marked!
2. Dilllox posts must be wired to appropriate connectors according to Unit's Electrical Masterssheet.
3. On 12 conductor cables, wire #12's the Yellow wire with a Green stripe.

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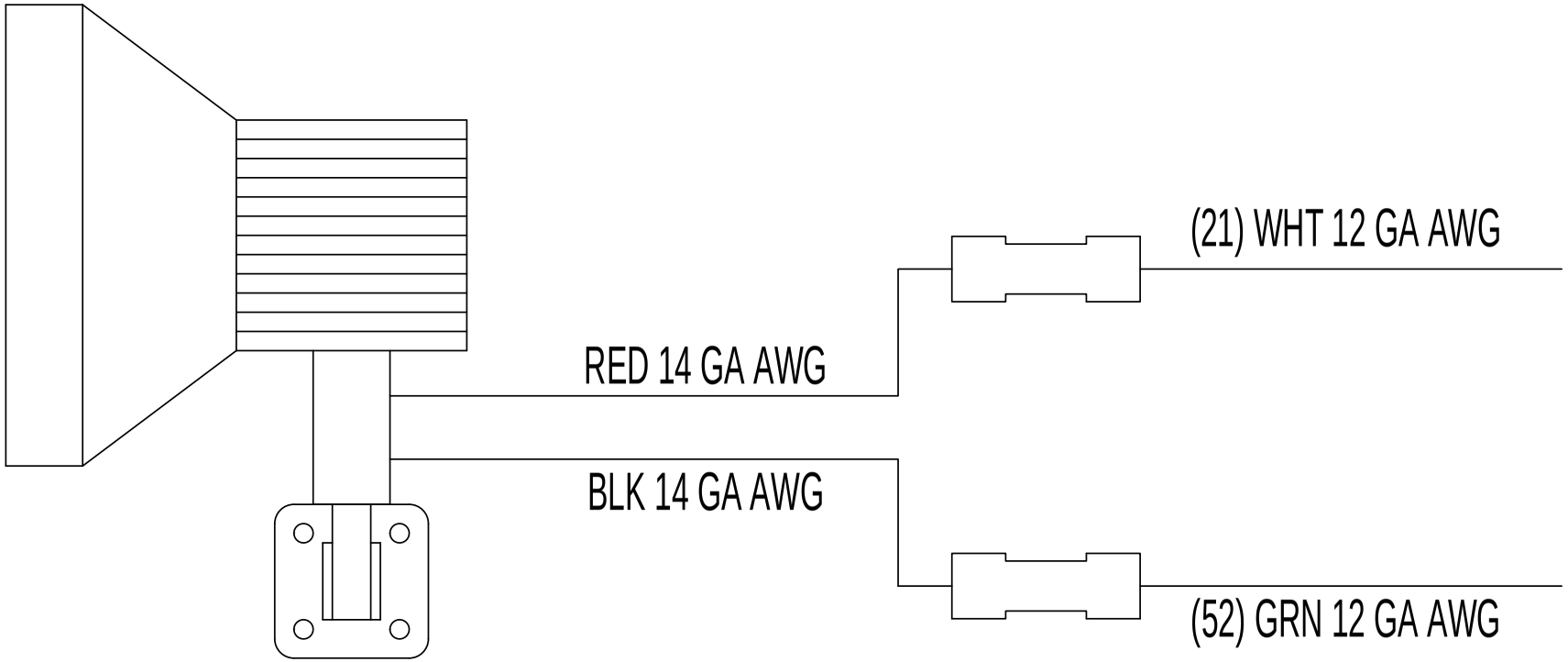
75T309 RBA Demo

REVISIONS				
REV	DRAFTER	DESCRIPTION	DATE	EFF. UNIT
0	--	Drawing released.	--	--
1	DWG	Title Block Updated	29 Dec 2011	



NOTES:
1. CAD DRAWING. DO NOT SCALE. WORK FROM DIMENSIONS AND REPORT ERRORS.
2. DIMENSIONS IN PARENTHESES ( ) DENOTE REFERENCE ONLY DIMENSION.
3. CNC BURN PROGRAM #
4. CNC MILL PROGRAM #

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Drawing Classification: ELEC DWG
Category: TIP
Books: ■ Elec - Main □ Elec - Chas Prep ■ Ldr Assm ■ Platform Assm

ITEM	PART #	DESCRIPTION	QTY.
ITEM	PART #	DESCRIPTION	QTY.

ROSENBAUER AERIALS, LLC.
870 SOUTH BROAD STREET FREMONT, NE 68025 (402) 721-7622

TITLE
ELECTRICAL SCHEMATIC
TIP LIGHT CONNECTION (Collins FX 12)

TOLERANCE		SIZE	PATH	DWG NO.	REV
FRACTIONAL	1/16"	A	Z:\STANDARDS\05 ELE\SCHEMATICS\12 VOLT LIGHTS\	1019960	1
DECIMAL	0.005"				
DRILL HOLE	1/64"				
ANGULAR	0.5°				

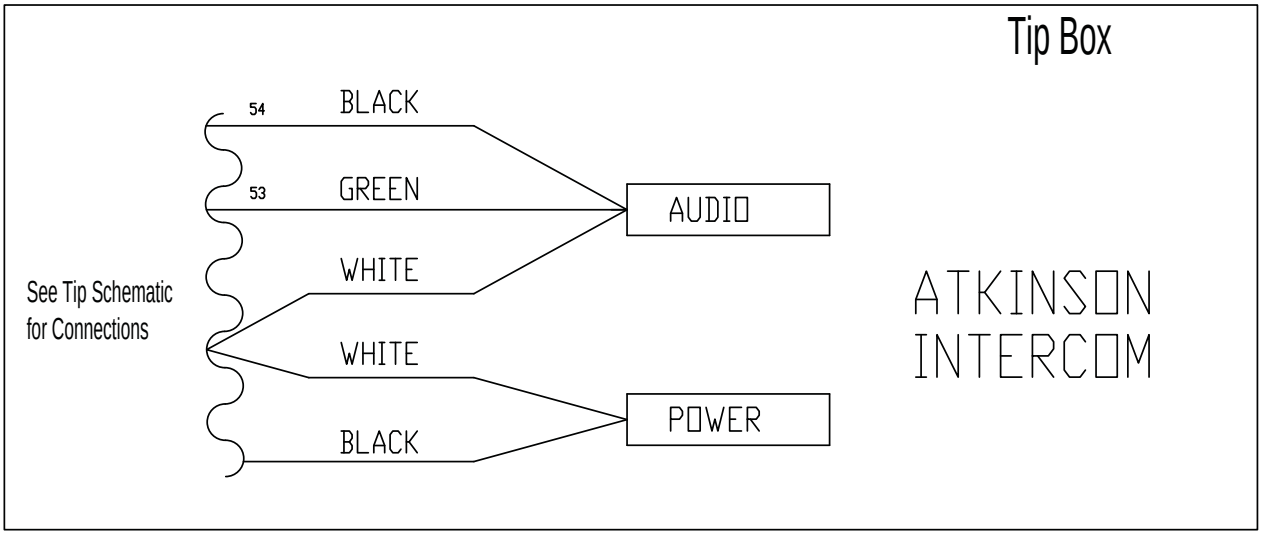
DATE	SHEET	ENG.
19 Sept 2006	1 OF 1	SLB

Rosenbauer
Firefighting Technology

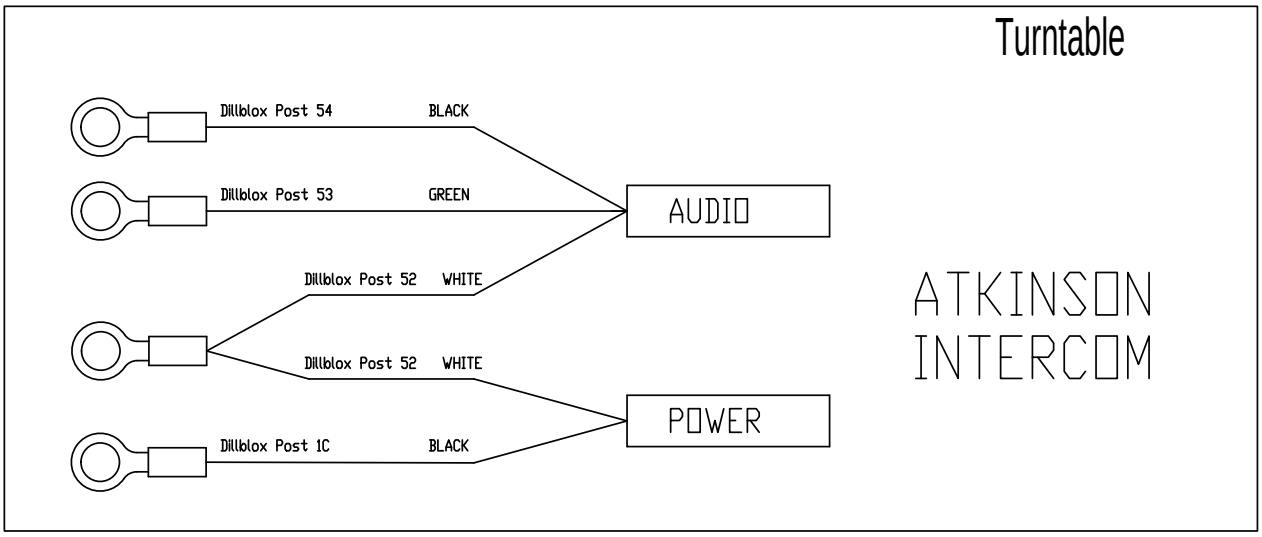
75T309 (7365)

REVISIONS				
REV	DRAFTER	DESCRIPTION	DATE	EFF. UNIT
1	DWG	Titleblock Updated	19 Apr 2012	--

Tip Box



Turntable



NOTES:
1. CAD DRAWING. DO NOT SCALE. WORK FROM DIMENSIONS AND REPORT ERRORS.
2. Assumed that all 53 and 54 dillblox post are connected together.

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ITEM	PART #	DESCRIPTION	QTY.
ITEM	PART #	DESCRIPTION	QTY.

Drawing Classification: ELEC DWG
Category: INTERCOM
Books: Elec - Main; Elec - Chas Prep; Elec - Main # 2; Ldr Assy; Platform Assy; Final Finish

ROSENBAUER AERIALS, LLC.
870 SOUTH BROAD STREET FREMONT, NE 68025 (402) 721-7622

TITLE: ATKINSON INTERCOM WIRING SCHEMATIC

TOLERANCE		SIZE	PATH	DWG NO.	REV
FRACTIONAL	1/16"	A	Z:\STANDARDS\05 ELE\SCHEMATICS\INTERCOMS	1087620	1
DECIMAL	0.005"				
DRILL HOLE	1/64"				
ANGULAR	0.5°				

DATE	SHEET	ENG.
15 NOV 2011	1 OF 1	DW Groh

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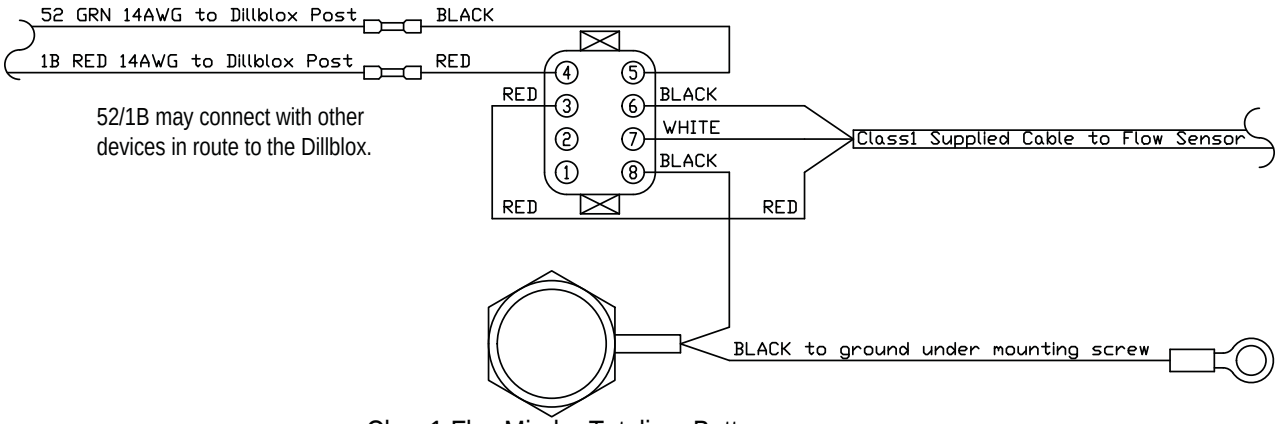
REVISIONS				
REV	DRAFTER	DESCRIPTION	DATE	EFF. UNIT
1	DWG	Titleblock Update	5 Jan 2012	--
2	DWG	Titleblock Update	19 Apr 2012	

Inside Turntable Control Stand

Class1 FlowMinder Single Display Harness
inside Turntable Control Stand



Class1 FlowMinder Totalizer Button
on Turntable Console
Normally Open Push Button

ITEM	PART #	DESCRIPTION	QTY.

ITEM	PART #	DESCRIPTION	QTY.

NOTES:
1. Refer to unit's Electrical Mastersheet for specific connector pin assignments!

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Drawing Classification: ELEC DWG
Category: GAUGES
Books: ☐ Ldr Assy ☐ Platform Assy ■ Final Finish ■ Elec - Main ☐ Elec - Chas Prep ☐ Elec - Main # 2

ROSENBAUER AERIALS, LLC.
870 SOUTH BROAD STREET FREMONT, NE 68025 (402) 721-7622

TITLE
FlowMinder Wiring Schematic
Turntable Single Display

TOLERANCE		SIZE	PATH	DWG NO.	REV
FRACTIONAL	1/16"	A	Z:\STANDARDS\05 ELE\SCHEMATICS\	1017250	2
DECIMAL	0.005"				
DRILL HOLE	1/64"				
ANGULAR	0.5°				

DATE	SHEET	ENG.
23 AUG 2006	1 OF 1	CM MORRIS

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These checks and services have been provided to help you keep you aerial in good operating condition and in service.

The preventive maintenance section is intended to formally maintain and document the aerial device on a regular schedule. This schedule is intended as a minimum and is greatly dependent on operating conditions. Heavy use and extreme environmental conditions such as heat, cold, sand, or salt spray will demand increased inspection and maintenance.

The preventive maintenance section is not intended to replace or negate any routine pre-operation safety inspections. The aerial operator must be aware of the condition of the aerial equipment before operating. A pre-operational visual safety inspection should always be preformed, including checking stabilizers, aerial pivot pins and retaining hardware, cables, sheaves, basket pivot pins, retaining hardware, etc.

Fill out the information below and return with the check list. This will allow us to keep a maintenance history of your aerial for future reference. Any additional information found during the inspection should be included with the check list. See mailing and fax information in the introduction section of this manual.

TRUCK INFORMATION FORM

Fire Department: _____

Address: _____

City/State/Zip: _____/_____/_____

Inspected by: _____

Date of inspection: _____

Aerial model number: _____ Manufacturing job number: _____

Hours of operation: _____

Type of inspection:

- ☐ 25 hour/ Primary Inspection
- ☐ 50 hour/ Annual Inspection
- ☐ 100 hour/ Annual Inspection
- ☐ 400 hour/Annual Inspection

Weather conditions:

Approximate temperature: _____

- ☐ Overcast
- ☐ Snow
- ☐ Partly Cloudy
- ☐ Rain
- ☐ Clear

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PRIMARY INSPECTION: 25 Hours of Operation

Review Date:_____/_____/_____

Symbols: ✓ = Okay ◯ = Repairs needed

IMPORTANT NOTE: Preform primary inspection within the first 25 hours of operation and with each inspection there after.

STATUS	ITEM	CORRECTIVE ACTION	DATE REPAIR COMPLETED
	PTO Engages Properly		
	Aerial Master Switch		
	Neutral Safety		
	Outrigger High Idle Switch		
	Aerial High Idle Switch		
	Stabilizer Interlock		
	Aerial Interlock		
	Safety Decals		
	Outrigger Safety Pins		
	Aerial Pivot Pins, Cylinder Hoist Pins & Extension Pins		
	Intercoms		
	Rung Covers		
	Breathing Air		
	Aerial Controls		
	Rung Alignment Indicator		
	Aerial Load Gauge		
	Aerial Control Gauges, Switches & Indicator Lights		
	Outrigger Override		
	Aerial Override		
	Retractable Waterway		
	Radio Remote Controls (optional)		
	Emergency Power		
	Hydraulic Oil Level		
	Hydraulic Oil Return Filter		
	Check & Adjust (if needed) Extension/Retraction Cables/ Sheaves Tension		

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PRIMARY INSPECTION: 50 Hours of Operation

Review Date:_____/_____/_____

Symbols: ✓= Okay ◯ = Repairs needed

IMPORTANT NOTE: Preform primary inspection within the first 25 hours of operation and with each inspection there after.

STATUS	ITEM	CORRECTIVE ACTION	DATE REPAIR COMPLETED
	Hoist Cylinder Leaks		
	Extension Cylinder Leaks		
	Electrical Lines & E-Chain		
	Waterway Alignment & Mounting		
	Completely Grease Aerial		
	Clean Entire Aerial Device		
	Hydraulic Pump/PTO		
	Waterway Slip Tubes		
	Waterway Lubrication		
	Waterway Function		
	Check & Adjust (if needed) Extension/ Retraction Cables/Sheaves Tension		

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PRIMARY INSPECTION: 100 Hours of Operation

Review Date:_____/_____/_____

Symbols: ✓= Okay ◯ = Repairs needed

IMPORTANT NOTE: Preform primary inspection within the first 25 hours of operation and with each inspection there after.

STATUS	ITEM	CORRECTIVE ACTION	DATE REPAIR COMPLETED
	Stabilizer Setup for Each Stabilizer		
	Scoring on Stabilizer Up & Down Jacks		
	Stabilizer Alignment		
	Scoring on Stabilizer Beams		
	Snap Rings on Stabilizer Pins		
	Security of Bottom Pins on Outrigger Pads		
	Security of Hydraulic Lines on Outrigger Extension Cylinders/ Outrigger Roll Hoses		
	Leaks in Hydraulic Lines on Jack Cylinders		
	Leaks in Hydraulic Lines on Main Pressure & Return		
	Leaks in Outrigger Valves & Hoses		
	Swing Brake Mounting & Leaks		
	Planetary Mounting		
	Hydraulic Motor for Ladder Rotation		
	Swing Brake Manifold & Adjustment		
	Operation of Swing Brake		
	Adjust Extension/Retraction Cables/Sheaves Tension		
	Cable Sheaves Alignment		
	Rear Slide Pads (all sides, rear & bottom)		
	All Front Section Slide Pads (all side & bottom)		
	Inspect Bull Gears		
	Grease Rotation Bearing		
	Grease Bull Gear		
	Stainless Steal Scuff Pad on Base (optional)		
	Deutsche Electrical Connection		
	Sealed Electrical Connections		

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PRIMARY INSPECTION: 400 Hours of Operation

Review Date:_____/_____/_____

Symbols: ✓= Okay ◯ = Repairs needed

IMPORTANT NOTE: Preform primary inspection within the first 25 hours of operation and with each inspection there after.

STATUS	ITEM	CORRECTIVE ACTION	DATE REPAIR COMPLETED
	Stabilizer Wear Pads		
	Stabilizer Cylinder Drift Down for all Stabilizers (1/4” per hour)		
	Synchronized Operation of Hoist Cylinder		
	Aerial Hoist Cylinder Drift Down: Right Cylinder (1/2” per hour tolerance)		
	Aerial Hoist Cylinder Drift Down: Left Cylinder (1/2” per hour tolerance)		
	Extension Cylinder Drift Down (1/2” per hour)		
	Stabilizer Extension Cylinder Proper Timing for All Stabilizers		
	Synchronized Operation of Hoist Cylinders		
	Take Sample of Hydraulic Oil from Reservoir		
	Pinion Gear Back Lash		
	Aerial Bed Cradle Mounting		
	Re-Torque Frame Mounting Bolts		
	Aerial Bed Cradle Weldments		
	Swivel Water Mounting/Leaks		
	Swivel Hydraulic Mounting/Leaks		
	Swivel Electrical Mounting/Leaks		
	Retorque Aerial Turntable Bearing (top & bottom)		
	Aerial Functional Time		

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